

**Iowa Department of Natural Resources
Title V Operating Permit**

**Name of Permitted Facility: Archer Daniels Midland—
Des Moines Soybean Plant**

Facility Location: 1935 E. Euclid Avenue, Des Moines, IA

Air Quality Operating Permit Number: 04-TV-020-M001

Expiration Date: December 14, 2009

EIQ Number: 92-6313

Facility File Number: 77-01-045

Responsible Official

Name: Mr. Rick Benware

Title: Plant Manager

**Mailing Address: 1935 E Euclid
Des Moines, IA 50316**

Phone #: 515-263-3285

Permit Contact Person for the Facility

Name: Mr. Rick Benware

Title: Plant Manager

**Mailing Address: 1935 E. Euclid
Des Moines, IA 50316**

Phone #: 515-263-3285

This permit is issued in accordance with 567 Iowa Administrative Code Chapter 22, and is issued subject to the terms and conditions contained in this permit.

For the Director of the Department of Natural Resources

Douglas A. Campbell, Supervisor of Air Operating Permits Section

Date

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Abbreviations

acfm.....	actual cubic feet per minute
AQD.....	Polk County Public Health- Air Quality Division
CAS.....	Chemical Abstract Service Registry
CFR.....	Code of Federal Regulation
°F.....	degrees Fahrenheit
EIQ.....	Emissions Inventory Questionnaire
EP.....	Emission Point
EU.....	Emission Unit
gr./dscf	grains per dry standard cubic foot
gr./ 100 cf.....	grains per one hundred cubic feet
IAC.....	Iowa Administrative Code
IDNR.....	Iowa Department of Natural Resources
ISCST.....	Industrial Source Complex Short Term Dispersion Model
MACT.....	Maximum Achievable Control Technology
µg/m ³	Micrograms per Cubic Meter
MM BTU/ Hr.....	Million British Thermal Units per Hour
mmscf/hr.....	Million Standard Cubic Feet per Hour
MSCF/hr.....	Thousand Standard Cubic Feet per Hour
MSDS.....	Material Safety Data Sheet(s)
MVAC.....	Motor Vehicle Air Conditioner
NESHAP.....	National Emission Standards for Hazardous Air Pollutants
NSPS	New Source Performance Standard
ppmv.....	parts per million by volume
psia.....	pounds per square inch absolute
lb./hr	pounds per hour
lb./MMBtu	pounds per Million British thermal units
scfm.....	standard cubic feet per minute
SIC.....	Standard Industrial Classification
SLR.....	Solvent Loss Ratio
TPY.....	Tons Per Year
USEPA.....	United States Environmental Protection Agency

Pollutants

PM.....	Particulate Matter
PM ₁₀	Particulate Matter ten microns or less in diameter
SO ₂	Sulfur dioxide
NO _x	Nitrogen Oxides
VOC(s).....	Volatile Organic Compound(s)
CO	Carbon Monoxide
HAP(s)	Hazardous Air Pollutant(s)
THC.....	Total HydroCarbons

I. Facility Description and Equipment List

Facility Name: Archer Daniels Midland - Des Moines Soybean Plant

Permit Number: 04-TV-020-M001

Facility Description: This facility produces soybean meal and refined vegetable oil. The Des Moines plant also maintains a coal fired cogeneration facility for the generation of process steam and electricity.

Soybeans are received at the Des Moines facility by either truck or railcar. The beans are then cleaned and conveyed to storage. When the beans have high moisture content, such as during harvest time, they may be dried in one of three grain dryers located onsite.

Processing of the soybeans includes drying, cracking, de-hulling and flaking prior to vegetable oil extraction. Hulls removed from the bean are ground and possibly pelletized to aid in hull transfer/load-out. The defatted flakes from the extraction process are sent through a series of processes that de-solventize, dry and grind the resulting meal. The meal and hulls/pellets are transferred to storage until loaded out either by rail or truck.

The vegetable oil extracted from the soybeans is separated from the solvent used in the extraction process and then sent to the onsite vegetable oil refinery for further processing. The refining process removes impurities and residual solvent in the oil.

Equipment List

Emission Point Number	Associated Emission Unit(s) Number (s)	Associated Emission Unit Description
U01	U01	West Truck Receiving
U02	U02	East Truck Receiving
U03	U03 GP010	Rail Receiving #1 and Conveying to 500,000 Bushel Storage Tanks
U04	U04	Grain Conveying
U05,U05a	U05	Grain Storage – 4 West Bean Tanks
U06	U06	Rail Receiving #2
GP01,1a	GP01	Bean Cleaning
GP02	GP02	2- 500,000 Bushel Bean Storage Tanks
GP03a	GP03a,a1,a2	South Grain Dryer
GP03b	GP03b,b1,b2	Center Grain Dryer
GP03c	GP03c,c1,c2	North Grain Dryer
GP04,	GP04	Conveying to Processing
GP05,	GP05	Conditioning/De-hulling (Cyclone)
GP05a		Conditioning/De-hulling (Baghouse)
GP06a	GP06	Flaking
GP07	GP07	Conveyor to Extractor
GP08	GP08	Collet Cooler
GP09	GP09,	Extractor (Solvent Bubble),
	MP01,	DTDC and
	GP014	Hexane Tanks
GP011	GP011	Material Conveying
GP013	GP013	Emergency lighting Generator
GP015	GP015	Prep Building Central Vacuum Cleaning System
HR01	HR01	Hull Gravity Tables/ Secondary Aspiration
HR02	HR02	Hull Grinding
HR03	HR03	Pellet Cooler
HR04	HR04	Hull/Pellet Storage

MP01a,b, c, d and e	MP01	DTDC – Dryer /Cooler
MP02	MP02	Meal Grinding
MP03	MP03	Meal Transfer
MP04	MP04	Flowability Agent Receiving/Storage
MP05	MP05	Meal Building and Conveying
MP06	MP06	Truck Load-out
MP07	MP07	Rail Load-out
MP08	MP08	Meal Storage Tank Vents
MP09	MP09	Meal Blend Tanks Vents
R01	R01	Filter Aid Receiving/Storage
R02	R02	Bleaching Clay Receiving/Storage
R03	R03	Slurry/Pre-coat Tanks
R04	R04	Filter Aid/Bleaching Agent Daybins
R05	R05	Hydrogen Generator
C01	C01	Coal Receiving/Conveying
C02	C02	Coal Storage
C03	C03	Coal Feeders
C04	C04	Limestone Receiving/Daybin
C05	C05, 5a	Main Boiler, Start-up/ Pre-heat
C06a, b	C06,C08	Fly-ash Conveying, Load-out
C07	C07	Fly-ash Silo
C09, C09a	C09, 9a,9b	Primary Standby Boiler
C012	C012	Emergency Generator #2

Insignificant Equipment List

Insignificant Emission Unit Number	Insignificant Emission Unit Description
IA1	Extraction Diesel Pump
IA2	Thermal Heater
IA3	Day Bagger
IA5	No. 2 Fuel Oil Tanks 2-15,000 gallons
IA6	Dilute Acid Tank - 3196 gallons
IA7	Concentrated Acid Tank – 10,000 gallons
IA8	Yard Waste Hopper
IA9	Refinery Diesel Pump
IA10	Primary Boiler Lube Oil Tank – 790 gallons
IA11	Working Loss Wastewater Tank – 15,863 gallons
IA12	Vent Off Sewer Line
IA13	Refinery Cooling Tower
IA14	CoGen Cooling Tower
IA15	Extraction Cooling Tower
IA16	Hot Gas Generator

II. Plant-Wide Conditions

Facility Name: Archer Daniels Midland – Des Moines Soybean Plant
Permit Number: 04-TV-020-M001

Permit conditions are established in accord with 567 Iowa Administrative Code Rule 22.108

Permit Duration

The term of this permit is: Five (5) years from the date of permit issuance.
Commencing on: December 14, 2004
Ending on: December 14, 2009

Amendments, modifications and re-openings of the permit shall be obtained in accordance with 567 Iowa Administrative Code Rules 22.110 - 22.114. Permits may be suspended, terminated, or revoked as specified in 567 Iowa Administrative Code Rules 22.115.

Plant-Wide Emission Limits

Unless specified otherwise in the Emission Point Specific Conditions, the source is subject to the specified emission limit and supporting regulation:

Opacity (visible emissions): <20% opacity

Authority for Requirement: Polk County Board of Health Rules and Regulations
Chapter V, Article IV, Section 5-9

Sulfur Dioxide (SO₂): 500 parts per million by volume

Authority for Requirement: 567 IAC 23.3(3)"e"

Polk County Board of Health Rules and Regulation
Chapter V, Article IX, Section 5-27

Particulate Matter: If the Polk County Health Officer determines that a process complying with the emission rates specified in Table 1 of Section 5-15 of Polk County Board of Health Rules and Regulations Chapter V is causing or will cause air pollution, the Polk County Health Officer will notify the source of such determination. Upon notification, the source shall not emit particulates in amounts greater than 0.10 grain per standard cubic foot of exhaust gas.

Authority for Requirement: Polk County Board of Health Rules and Regulations
Chapter V, Article VI, Section 5-14(b)

Combustion for indirect heating: Inside any metropolitan statistical area, the maximum allowable emission from each stack, irrespective of stack height, shall be 0.6 pounds of particulates per million Btu input.

Authority for Requirement: 567 IAC 23.3(2)"b"(2)

Polk County Board of Health Rules and Regulations
Chapter V, Article VI, Section 5-15(b)

Fugitive Dust: It shall be unlawful for any person handling, loading, unloading, reloading, storing, transferring, transporting, placing, depositing, throwing, discarding, or scattering any ashes, fly ash, cinders, slag or dust collected from any combination process, any dust, dirt, chaff, wastepaper, trash, rubbish, waste or refuse matter of any kind, or any other substance or material whatever, which is likely to be scattered by the wind, or is susceptible to being wind-borne, to do so without taking reasonable precautions or measures to prevent particulate matter from becoming airborne so as to minimize atmospheric pollution.

Authority for Requirement: Polk County Board of Health Rules and Regulations
Chapter V, Article IX, Section 5-24

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

The quantity of soybeans processed during any twelve month rolling period shall not exceed 1,259,980 tons.

Records documenting monthly totals and the 12 month rolling total shall be kept and made available upon request.

Authority for Requirement: 567 IAC 22.108(14)

Compliance Plan

The owner/operator shall comply with the applicable requirements listed below. The compliance status is based on information provided by the applicant.

Archer Daniels Midland (ADM) has entered into a Consent Decree with the United States EPA and 14 state and local air programs (Including the State of Iowa and Polk County Air Quality Division) in order to resolve a number of alleged violations at its 43 facilities located in 16 states. Included in this Consent Decree is the Soybean processing plant in Des Moines, Iowa.

A copy of the Consent Decree is available on the internet at the following address:

www.epa.gov/compliance/resources/decrees/index.html

The Authority for this is: Consent Decree C.D. IL, #03-CV-2066
567 IAC 22.108(1)

ADM shall meet all requirements of the Consent Decree. Included among those requirements that are applicable to the Des Moines facility are:

- 1) By no later than December 31, 2007, ADM shall propose in writing to the Plaintiffs final VOC SLR limits for each oilseed plant ...that satisfy the requirements of Paragraphs 67 through 69 (of the Consent Decree)...
- 2) For a plant that has an existing permit limit lower than the applicable solvent loss factor (SLF) in 40 CFR part 63 Subpart GGGG (vegetable oil production NESHAP), ADM may not propose a final SLR limit that is greater than the existing limit....
- 3) The first compliance determination will be based on the first 12 operating months of data collected after the date on which each VOC SLR limit is proposed.
- 4) The capacity weighted average of the Final SLR limit for the conventional soybean plants shall not exceed 0.175 gal/ton.
- 5) The capacity weighted averages shall be based on the design capacity for each facility. Within 90 days of the lodging of the Consent Decree, ADM shall submit, for approval by EPA and the appropriate Plaintiffs, the design capacity values for this facility. For the purposes of the Consent Decree, design capacity is the “maximum permitted crush capacity” that a plant is allowed to process in a given time period under its operating permit, or, if not limit is included in the operating permit, the facility’s maximum physical capacity. This number shall be expressed as “tons of crush per day.”
- 6) Solvent Loss Limits. Compliance with the interim and final VOC SLR limits in the Consent Decree shall be determined in accordance with 40 CFR Part 63, Subpart GGGG, with the following exceptions: 1) provisions pertaining to HAP content shall not apply; 2) monitoring and recordkeeping of solvent losses at each plant shall be conducted daily; 3) solvent losses and quantities of oilseed processed during startup and shutdown periods shall be kept in the form of the table in Attachment 13, that show total solvent losses, solvent losses during malfunction periods, and adjusted solvent losses (i.e., total solvent losses minus malfunction losses) monthly and on a twelve month rolling basis.
- 7) Malfunctions. ADM may apply the provisions of 40 CFR Part 63 Subpart GGGG pertaining to malfunction periods only when both of the following conditions are met: 1) The malfunction results in a total plant shutdown. For the purposes of the decree, a “total plant shutdown “ means a shutdown of the solvent extraction system and 2) Cumulative solvent losses during malfunction periods at the plant do not exceed 4,000 gallons in a 12-month rolling period. At all other times, ADM must include all solvent losses when determining compliance with its interim or final VOC SLR limits at the plant. During a malfunction period, ADM shall comply with the Start up, Shutdown, Malfunction (“SSM”) Plan as required under Subpart GGGG for the plant. The solvent loss will be calculated as the difference in the total solvent inventories for the day before the malfunction period began and the day the plant resumes normal operation.

- 8) General Permitting Requirements. ADM shall seek to obtain all appropriate construction permits or permit waivers for emission reduction projects undertaken to comply with interim or final VOC SLR limits, as determined in accordance with the rules and practice of the appropriate permitting authority.
- 9) NAAQS Modeling in Iowa. ADM shall submit NAAQS modeling to Iowa DNR for the Des Moines Soybean Processing Plant(SO₂, NO_x and PM₁₀) within five years from the date of lodging.
- 10) Environmental Audits. ADM shall conduct a comprehensive review of the compliance status of this plant a minimum of twice during the life of the Decree. These audits shall be conducted as required by the Decree.

Unless otherwise noted in Section III of this permit, Archer Daniels Midland Des Moines Soybean Plant is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which become effective during the permit term, Archer Daniels Midland Des Moines Soybean Plant shall comply with such requirements in a timely manner.

Authority for Requirement: 567 IAC 22.108(15)

III. Emission Point-Specific Conditions

Facility Name: Archer Daniels Midland - Des Moines Soybean Facility
Permit Number: 04-TV-020-M001

Emission Point ID Number: U01- West Truck Receiving

Associated Equipment

Associated Emission Unit ID Numbers: U01
Emissions Control Equipment ID Number: U01
Emissions Control Equipment Description: Carter Day Baghouse - Model #72RJ60

Applicable Requirements

Emission Unit vented through this Emission Point: U01
Emission Unit Description: West truck receiving
Raw Material/Fuel: Soybeans
Rated Capacity: 500 tons/hour

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit: <20%
Authority for Requirement: Polk County Board of Health Rules and Regulations
Chapter V Section 5-9

Pollutant: PM
Emission Limit: 0.1 gr/scf
Authority for Requirement: City of Des Moines Construction Permit #081
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-16 (g)
567 IAC 23.4(7)

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Work practice standards: Routine maintenance and inspection
Authority for Requirement: City of Des Moines Construction Permit #081

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

EP U01 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity $\geq 20\%$ is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: U02 East Truck Receiving

Associated Equipment

Associated Emission Unit ID Numbers: U02
Emissions Control Equipment ID Number: U02
Emissions Control Equipment Description: Carter Day Baghouse Model #72RJ60

Applicable Requirements

Emission Unit vented through this Emission Point: U02
Emission Unit Description: East truck receiving
Raw Material/Fuel: Soybeans
Rated Capacity: 500 tons/hour

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit: <20%
Authority for Requirement: Polk County Board of Health Rules and Regulations
Chapter V Section 5-9

Pollutant: PM
Emission Limit: 0.1 gr/scf
Authority for Requirement: City of Des Moines Construction Permit #081
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-16(g)
567 IAC 23.4(7)

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Work practice standards: Routine maintenance and inspection
Authority for Requirement: City of Des Moines Construction Permit #081

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

EP U02 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity $\geq 20\%$ is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: U03 Rail Receiving #1, and Conveying to 500,000 Bushel Storage Tanks

Associated Equipment

Associated Emission Unit ID Numbers: U03 and GP010

Emissions Control Equipment ID Number: U03

Emissions Control Equipment Description: Donaldson Baghouse Model# 232-RFW-12

Applicable Requirements

Emission Unit vented through this Emission Point: U03 and GP010

Emission Unit Description: Rail receiving #1 and Conveying to 500, 000 Bushel Storage Tanks

Raw Material/Fuel: Soybeans

Rated Capacity: 960 tons/hour

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limits: None allowed from stack.

Fugitive emissions shall not exceed five percent (5%) opacity.

Authority for Requirement: Polk County Construction Permit #0802

40 CFR60 Subpart DD

567 IAC 23.1(2)"ooo"

Pollutant: PM

Emission Limits: 0.01 gr/scf

2.6 lb/hr

11.263 Tons/year

Authority for Requirement: Polk County Construction Permit #0802

40 CFR60 Subpart DD

567 IAC 23.1(2)"ooo"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Work practice standards: Shed doors must be closed while dumping

Authority for Requirement: Polk County Construction Permit #0802

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 28 feet above grade

Authority for Requirement: Polk County Construction Permit #0802

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

EP U03 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity >0% is observed from the stack, or fugitive emissions greater than five percent (5%) opacity, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: U04 Grain Conveying

Associated Equipment

Associated Emission Unit ID Numbers: U04

Emissions Control Equipment ID Number: U04

Emissions Control Equipment Description: Carter Day Baghouse Model# 144RJ120

Applicable Requirements

Emission Unit vented through this Emission Point: U04

Emission Unit Description: Grain conveying

Raw Material/Fuel: Soybeans

Rated Capacity: 500 tons/hour

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: <20%

Authority for Requirement: City of Des Moines Construction Permit #0082
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-9

Pollutant: PM

Emission Limit: 0.1 gr/scf

Authority for Requirement: City of Des Moines Construction Permit #0082
567 IAC 23.4(7) Standards for Grain Handling and
Processing Plants.
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-16

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

EP U04 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity $\geq 20\%$ is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: U05, U05a - Grain Storage - 4 West Bean Tanks

Applicable Requirements

Emission Unit vented through this Emission Point: U05
Emission Unit Description: Grain storage – 4 West bean tanks
Raw Material/Fuel: Soybeans
Rated Capacity: 500 tons/hour

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from each emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: <20%

Authority for Requirement: City of Des Moines Construction Permit #082
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-9

Pollutant: PM

Emission Limit: 0.1 gr/scf

Authority for Requirement: City of Des Moines Construction Permit #082
567 IAC 23.4(7) Standards for Grain Handling and
Processing Plants.
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-16

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

EP U05, U05a shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity $\geq 20\%$ is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: U06 Rail Receiving #2

Associated Equipment

Associated Emission Unit ID Numbers: U06

Emissions Control Equipment ID Number: U06

Emissions Control Equipment Description: Carter Day Baghouse Model #72RJ37

Applicable Requirements

Emission Unit vented through this Emission Point: U06

Emission Unit Description: Rail receiving #2

Raw Material/Fuel: Soybeans

Rated Capacity: 500 Tons/hour

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: <20%

Authority for Requirement: City of Des Moines Construction Permit #0104
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-9

Pollutant: PM

Emission Limit: 0.1 gr/scf

Authority for Requirement: City of Des Moines Construction Permit #0104
567 IAC 23.4(7) Standards for Grain Handling and
Processing Plants.
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-16

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

EP U06 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity $\geq 20\%$ is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: GP01, GP01a - Bean Cleaning

Associated Equipment

Associated Emission Unit ID Numbers: GP01

Emissions Control Equipment ID Number: GP01

Emissions Control Equipment Description: Carter Day Baghouse Model #72RJ60

Emissions Control Equipment ID Number: GP01a

Emissions Control Equipment Description: Carter Day Baghouse Model #72RJ72 one of two baghouses in parallel.

Emissions Control Equipment ID Number: GP01b

Emissions Control Equipment Description: Carter Day Baghouse Model #72RJ72 one of two baghouses in parallel.

Applicable Requirements

Emission Unit vented through this Emission Point: GP01

Emission Unit Description: Bean Cleaning

Raw Material/Fuel: Soybeans

Rated Capacity: 195 Tons/hour

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from each emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: <20%

Authority for Requirement: City of Des Moines Construction Permits #0083
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-9

Pollutant: PM

Emission Limit: 0.1 gr/scf

Authority for Requirement: City of Des Moines Construction Permits #0083
567 IAC 23.4(7) Standards for Grain Handling and
Processing Plants.
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-16

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

GP01 and GP01a shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity $\geq 20\%$ is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: GP02 – 2 - 500,000 Bushel Bean Storage Tanks

Associated Equipment

Associated Emission Unit ID Numbers: GP02
Emissions Control Equipment ID Number: N/A
Emissions Control Equipment Description: N/A

Applicable Requirements

Emission Unit vented through this Emission Point: GP02
Emission Unit Description: 2 - 500,000 bushel bean storage tanks
Raw Material/Fuel: Soybeans
Rated Capacity: 960 Tons/hour

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit: <20%
Authority for Requirement: Polk County Board of Health Rules and Regulations
Chapter V, Section 5-9

Pollutant: PM
Emission Limit: 0.1 gr/scf
Authority for Requirement: 567 IAC 23.4(7) Standards for Grain Handling and Processing Plants.
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-16

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

EP GP02 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity $\geq 20\%$ is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: GP03a - South Grain Dryer

Associated Equipment

Associated Emission Unit ID Numbers: GP03a, GP03a1, GP03a2

Applicable Requirements

EP	EU	Emission Unit Description	Raw Material	Rated Capacity
GP03a	GP03a	South grain dryer	Soybeans	135 Tons/hr
GP03a	GP03a1	Grain drying – Natural gas combustion	Natural gas	30 MMBTU/hr
GP03a	GP03a2	Grain drying – Fuel oil combustion	No. 2 Fuel oil	30 MMBTU/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: <20%

Authority for Requirement: City of Des Moines Construction Permit #0079
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-9

Pollutant: PM

Emission Limit: 0.1gr/scf

Authority for Requirement: City of Des Moines Construction Permit #0079
567 IAC 23.4(7) Standards for Grain Handling and Processing Plants.
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-16

Pollutant: SO₂

Emission Limits: 0.5 lb/MMBTU of heat input while burning distillate fuel
500 PPMV while burning natural gas

Authority for Requirement: Polk County Board of Health Rules and Regulations Chapter V Section 5-27 (2) (b)
567 IAC 23.3(3)"e"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

The permittee shall not combust number 1 or number 2 fuel oil exceeding a sulfur content of 0.5 percent by weight.

Reporting & Record keeping:

The following records shall be maintained on-site for five (5) years, and be available for inspection upon request by representatives of the Department of Natural Resources:

The facility shall monitor the percent of sulfur by weight in the fuel oil as delivered. The documentation may be vendor supplied or facility generated.

Authority for Requirement: 567 IAC 23.3(3)"b"(1)

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

EP GP03a shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity $\geq 20\%$ is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: GP03b - Center Grain Dryer

Associated Equipment

Associated Emission Unit ID Numbers: GP03b, GP03b1, GP03b2

Applicable Requirements

EP	EU	Emission Unit Description	Raw Material	Rated Capacity
GP03b	GP03b	Center grain dryer	Soybeans	54 Tons/hr
GP03b	GP03b1	Grain drying – Natural gas combustion	Natural gas	12 MMBTU/hr
GP03b	GP03b2	Grain drying – Fuel oil combustion	No. 2 Fuel oil	12 MMBTU/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: <20%

Authority for Requirement: City of Des Moines Construction Permit #0079
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-9

Pollutant: PM

Emission Limit: 0.1 gr/scf

Authority for Requirement: City of Des Moines Construction Permit #0079
567 IAC 23.4(7) Standards for Grain Handling and Processing Plants.
Polk County Board of Health Rules and Regulations
Chapter V Section 5-16

Pollutant: SO₂

Emission Limits: 0.5 lb/MMBTU of heat input while burning distillate fuel
500 PPMV while burning natural gas

Authority for Requirement: Polk County Board of Health Rules and Regulations
Chapter V Section 5-27 (2) (b)
567 IAC 23.3(3)"e"

Operational Limits & Requirements

Process throughput:

The permittee shall not combust number 1 or number 2 fuel oil exceeding a sulfur content of 0.5 percent by weight.

Reporting & Record keeping:

The following records shall be maintained on-site for five (5) years and be available for inspection upon request by representatives of the Department of Natural Resources:

1. The facility shall monitor the percent of sulfur by weight in the fuel oil as delivered. The documentation may be vendor supplied or facility generated.

Authority for Requirement: 567 IAC 23.3(3)"b"(1)

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

EP GP03b shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity $\geq 20\%$ is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Authority for Requirement: 567 IAC 23.3(3)"b"(1)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: GP03c - North Grain Dryer

Associated Equipment

Associated Emission Unit ID Numbers: GP03c, GP03c1, GP03c2

Applicable Requirements

<i>EP</i>	EU	Emission Unit Description	Raw Material	Rated Capacity
GP03c	GP03c	North grain dryer	Soybeans	60 Tons/hr
GP03c	GP03c1	Grain drying – Natural gas combustion	Natural gas	30 MMBTU/hr
GP03c	GP03c2	Grain drying – Fuel oil combustion	No. 2 Fuel oil	30 MMBTU/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: <20%

Authority for Requirement: City of Des Moines Construction Permit #0079
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-9

Pollutant: PM

Emission Limit: 0.1 gr/scf

Authority for Requirement: City of Des Moines Construction Permit #0079
567 IAC 23.4(7) Standards for Grain Handling and Processing Plants.
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-16

Pollutant: SO₂

Emission Limits: 0.5 lb/MMBTU of heat input while burning distillate fuel
500 PPMV while burning natural gas

Authority for Requirement: Polk County Board of Health Rules and Regulations
Chapter V, Section 5-27 (2) (b)
567 IAC 23.3(3)"e"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

The permittee shall not combust number 1 or number 2 fuel oil exceeding a sulfur content of 0.5 percent by weight.

Reporting & Record keeping:

The following records shall be maintained on-site for five (5) years, and be available for inspection upon request by representatives of the Department of Natural Resources:

The facility shall monitor the percent of sulfur by weight in the fuel oil as delivered. The documentation may be vendor supplied or facility generated.

Authority for Requirement: 567 IAC 23.3(3)"b"(1)

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

EP GP03c shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity $\geq 20\%$ is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: GP04 – Conveying to Processing

Associated Equipment

Associated Emission Unit ID Numbers: GP04

Emissions Control Equipment ID Number: GP04

Emissions Control Equipment Description: Carter Day Baghouse Model # 72RJ72

Applicable Requirements

Emission Unit vented through this Emission Point: GP04

Emission Unit Description: Soybean conveying

Raw Material/Fuel: Soybeans

Rated Capacity: 194 Tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: <20%

Authority for Requirement: City of Des Moines Construction Permit #0111
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-9

Pollutant: PM

Emission Limit: 0.1 gr/scf

Authority for Requirement: City of Des Moines Construction Permit #0111
567 IAC 23.4(7) Standards for Grain Handling and
Processing Plants.
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-16

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

EP GP04 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity $\geq 20\%$ is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: GP05 - Conditioning/Dehulling (cyclone)

Associated Equipment

Associated Emission Unit ID Number: GP05
Emissions Control Equipment ID Number: GP05
Emissions Control Equipment Description: Ducon-Micropul Cyclone Model
#995-VM-810

Applicable Requirements

Emission Unit vented through this Emission Point: GP05
Emission Unit Description: Bean conditioning
Raw Material/Fuel: Soybeans
Rated Capacity: 143.8 Tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit: <20%
Authority for Requirement: Polk County Construction Permit #1407
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-9

Pollutant: PM/ PM₁₀
Emission Limits: 0.1 gr/dscf
31.7 lb/hr
138.8 Ton/year
Authority for Requirement: Polk County Construction Permit #1407
567 IAC 23.4(7) Standards for Grain Handling and
Processing Plants.
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-16

Operational Limits & Requirements

The facility shall emit through the baghouse in order to minimize emissions except during periods of malfunction or maintenance.

The Maximum throughput of the dryer/conditioner is 143.8 T/hr.

To demonstrate the amount of time by-passing the baghouse, the facility shall install non-resettable hour meters on the fan for the cyclone and for the fan for the baghouse. The meters shall be read and logged monthly, with the difference between the two providing the hours of by-passing the baghouse.

Authority for Requirement: Polk County Construction Permit #1407

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

EP GP05 shall be visually checked for observable emissions once every week that the unit is in the “by-pass” mode, by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer’s signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity $\geq 20\%$ is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Authority for Requirement: Polk County Construction Permit #1407

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

**Emission Point ID Number: GP05a - Conditioning/Dehulling
(baghouse)**

Associated Equipment

Associated Emission Unit ID Number: GP05
Emissions Control Equipment ID Number: GP05a
Emissions Control Equipment Description: Pnuemafil Reverse Air II 11.5-350-12
Baghouse

Applicable Requirements

Emission Unit vented through this Emission Point: GP05
Emission Unit Description: Bean conditioning
Raw Material/Fuel: Soybeans
Rated Capacity: 143.8 Tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit: None allowed
Authority for Requirement: Polk County Construction Permit #1407
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-9

Pollutant: PM/ PM₁₀
Emission Limits: 0.0012 gr/scf
0.38 lb/hr
1.66 Ton/year
Authority for Requirement: Polk County Construction Permit #1407
567 IAC 23.4(7) Standards for Grain Handling and
Processing Plants.
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-16

Operational Limits & Requirements

The facility shall emit through the baghouse in order to minimize emissions except during periods of malfunction or maintenance.

The Maximum throughput of the dryer/conditioner is 143.8 T/hr.

To demonstrate the amount of time by-passing the baghouse, the facility shall install non-resettable hour meters on the fan for the cyclone and for the fan for the baghouse. The meters shall be read and logged monthly, with the difference between the two providing the hours of by-passing the baghouse.

Authority for Requirement: Polk County Construction Permit #1407

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

EP GP05a shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity > 0% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Stack Testing:

An Iowa Method 5 stack test was successfully conducted on the system on April 29, 2003 in accordance with Construction Permit 1407 requirements. The test demonstrated compliance with a PM/PM10 concentration of .0006 gr/dscf and an emission rate of 0.133 lb/hr.

Authority for Requirement – Polk County Construction Permit #1407

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: GP06a – Flaking

Associated Equipment

Associated Emission Unit ID Number: GP06
Emissions Control Equipment ID Number: GP06a
Emissions Control Equipment Description: Carter Day Cyclone Model #HV110

Applicable Requirements

Emission Unit vented through this Emission Point: GP06
Emission Unit Description: Flaking
Raw Material/Fuel: Soybeans
Rated Capacity: 143.8 Tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit: 0%
Authority for Requirement: Polk County Construction Permit #1618Modified

Pollutant: PM
Emission Limits: 0.031 gr/scf
5.32 lb/hr
23.31 ton/yr
Authority for Requirement: Polk County Construction Permit #1618Modified

Pollutant: PM10
Emission Limits: 0.0055 gr/scf
0.095 lb/hr
4.16 ton/yr
Authority for Requirement: Polk County Construction Permit #1618Modified

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated below, the owner/operator must notify the Department and obtain a permit amendment, if required.

Stack Height (feet): 70
Stack Diameter (inches): 30
Stack Exhaust Flow Rate (scfm): 20,300
Stack Temperature (°F): 160
Vertical Discharge Required: Yes ☐ No ☒
Authority for Requirement: Polk County Air Quality Construction Permit
#1618Modified

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

EP GP06a shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity >0% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Stack Testing:

Pollutant –PM/PM10

1st Stack Test to be completed by – August 4, 2004

Test Method: PM10=>Conducted according to 40CFR51, Appendix M, 201A
with 202

PM=>Conducted according to Iowa Compliance Sampling Manual - Method 5

Authority for Requirement – Polk County Construction Permit #1618

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: GP07 – Conveyor to Extractor

Applicable Requirements

Emission Unit vented through this Emission Point: GP07

Emission Unit Description: Conveyor to Extractor

Raw Material/Fuel: Flakes

Rated Capacity: 143.8 Tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: <20%

Authority for Requirement: City of Des Moines Construction Permit #0103
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-9

Pollutant: PM

Emission Limit: 0.1 gr/scf

Authority for Requirement: City of Des Moines Construction Permit #0103
567 IAC 23.4(7) Standards for Grain Handling and
Processing Plants.
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-16

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

EP GP07 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity $\geq 20\%$ is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: GP08 – Collet Cooler

Associated Equipment

Associated Emission Unit ID Numbers: GP08

Emissions Control Equipment ID Number: GP08

Emissions Control Equipment Description: Carter Day Cyclone Model #120 HV

Applicable Requirements

Emission Unit vented through this Emission Point: GP08

Emission Unit Description: Collet Cooler

Raw Material/Fuel: Flakes

Rated Capacity: 75 Tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: <20%

Authority for Requirement: Polk County Construction Permit #0565

Polk County Board of Health Rules and Regulations
Chapter V, Section 5-9

Pollutant: PM

Emission Limits: 0.0187 gr/scf
3.2 lb/hr

Authority for Requirement: Polk County Construction Permit #0565

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

EP GP08 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity $\geq 20\%$ is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: GP09 – Extractor (Solvent Bubble), DTDC and Hexane Tanks

Associated Equipment

Associated Emission Unit ID Numbers: GP09, MP01

Emissions Control Equipment ID Number: GP09

Emissions Control Equipment Description: Mineral Oil Scrubber

Applicable Requirements

EP	EU	Emission Unit Description	Raw Material	Rated Capacity
GP09	GP09	Extractor (Solvent bubble)	Hexane/Meal	143.8 Tons/hr
GP09	MP01	Desolventizer/Toaster Dryer/Cooler (DTDC)	Meal	143.8 Tons/hr
GP09	GP014	Hexane tanks	Hexane	2 Tanks - 30,000 gallons each

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: VOC

Emission Limits: 161.86 lb/hr
708.95 Tons/yr

Solvent loss factor of 0.2 gallons/ ton of crush in the compliance ratio calculation. An additional requirement will become effective on December 31, 2007 when the final solvent loss ratio (SLR) is proposed as required by the Consent Decree.

Authority for Requirement: City of Des Moines Construction Permit #0093
Consent Decree # (03-CV-2066)

Pollutant: n-Hexane

Emission Limits: Solvent loss factor of 0.2 gallon/ton of crush in the compliance ratio calculation.

103.59 lb/hr
453.72 Tons/year

Authority for Requirement: 40 CFR Part 63 Subpart GGGG
City of Des Moines Construction Permit #0093
567 IAC 23.1(4)"cg"
Consent Decree # (03-CV-2066)

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

This unit is subject to 40 CFR Part 63 Subpart GGGG - National Emission Standards for Solvent Extraction for Vegetable Oil Production and Subpart A – General Provisions. Below is a summary of those requirements.

- Note: For consistency purposes, citations are consistent with the CFR.

§63.2833 Is my source categorized as existing or new?

(a) This subpart applies to each existing and new affected source. You must categorize your vegetable oil production process as either an existing or a new source.

- This source was constructed before May 26, 2000 therefore it is considered an existing source.

§63.2834 When do I have to comply with the standards in this subpart?

(a) This source is considered an existing source, therefore it must be in compliance with this subpart within 3 years after the effective date (effective date = April 12, 2001).

STANDARDS

§63.2840 What emission requirements must I meet?

(a)(1) The emission requirements limit the number of gallons of HAP lost per ton of listed oilseeds processed. For each operating month, you must calculate a compliance ratio which compares your actual HAP loss to your allowable HAP loss for the previous 12 operating months as shown in Equation 1 of this section. An operating month, as defined in §63.2872, is any calendar month in which a source processes a listed oilseed, excluding any entire calendar month in which the source operated under an initial startup period subject to §63.2850(c)(2) or (d)(2) or a malfunction period subject to §63.2850(e)(2). Equation 1 of this section follows:

$$\text{Compliance Ratio} = \frac{\text{Actual HAP Loss}}{\text{Allowable HAP Loss}} \quad \text{Equation 1}$$

(2) Equation 1 of this section can also be expressed as a function of total solvent loss as shown in

Equation 2 of this section. Equation 2 of this section follows:

$$\text{Compliance Ratio} = \frac{f * \text{Actual Solvent Loss}}{0.64 * \sum_{i=1}^n ((\text{Oilseed})_i * (\text{SLF})_i)} \quad \text{Equation 2}$$

Where:

f = The weighted average volume fraction of HAP in solvent received during the previous 12 operating months, as determined in §63.2854, dimensionless.

0.64 = The average volume fraction of HAP in solvent in the baseline performance data, dimensionless.

Actual Solvent Loss = Gallons of actual solvent loss during previous 12 operating months, as determined in §63.2853.

Oilseed = Tons of each oilseed type “i” processed during the previous 12 operating months, as shown in §63.2855.

SLF = The corresponding solvent loss factor (gal/ton) for oilseed “i” listed in Table 1 of this section, as follows:

Table 1 of §63.2840 – Oilseed Solvent Loss Factors for Determining Allowable HAP Loss

Type of Oilseed Process	A source that...	Oilseed Solvent Loss Factor (gal/ton)	
		Existing Sources	New Sources
(i) Corn Germ, Wet Milling	processes corn germ that has been separated from other corn components using a “wet” process of centrifuging a slurry steeped in a dilute sulfurous acid solution.	0.4	0.3
(ii) Corn Germ, Dry Milling	processes corn germ that has been separated from the other corn components using a “dry” process of mechanical chafing and air sifting.	0.7	0.7
(iii) Cottonseed, Large	processes 120,000 tons or more of a combination of cottonseed and other listed oilseeds during all normal operating periods in a 12 operating month period.	0.5	0.4
(iv) Cottonseed, Small	processes less than 120,000 tons of a combination of cottonseed and other listed oilseeds during all normal operating periods in a 12 operating month period.	0.7	0.4
(v) Flax	processes flax.	0.6	0.6
(vi) Peanuts	processes peanuts.	1.2	0.7
(vii) Rapeseed	processes rapeseed.	0.7	0.3
(viii) Safflower	processes safflower.	0.7	0.7

(ix) Soybean, Conventional	uses a conventional style desolventizer to produce crude soybean oil products and soybean animal feed products.	0.2	0.2
(x) Soybean, Specialty	uses a special style desolventizer to produce soybean meal products for human and animal consumption.	1.7	1.5
(xi) Soybean, Combination Plant with Low Specialty Production	processes soybeans in both specialty and conventional desolventizers and the quantity of soybeans processed in specialty desolventizers during normal operating periods is less than 3.3 percent of total soybeans processed during all normal operating periods in a 12 operating month period. The corresponding solvent loss factor is an overall value and applies to the total quantity of soybeans processed.	0.25	0.25
(xii) Sunflower	processes sunflower.	0.4	0.3

(b) When your source has processed listed oilseed for 12 operating months, calculate the compliance ratio by the end of each calendar month following an operating month using Equation 2 of this section. When calculating your compliance ratio, consider the conditions and exclusions in paragraphs (b)(1) through (6) of this section:

- (1) If your source processes any quantity of listed oilseeds in a calendar month and the source is not operating under an initial startup period or malfunction period subject to §63.2850, then you must categorize the month as an operating month, as defined in §63.2872.
 - (2) The 12-month compliance ratio may include operating months occurring prior to a source shutdown and operating months that follow after the source resumes operation.
 - (3) If your source shuts down and processes no listed oilseed for an entire calendar month, then you must categorize the month as a nonoperating month, as defined in §63.2872. Exclude any nonoperating months from the compliance ratio determination.
 - (4) If your source is subject to an initial startup period as defined in §63.2872, exclude from the compliance ratio determination any solvent and oilseed information recorded for the initial startup period.
 - (5) If your source is subject to a malfunction period as defined in §63.2872, exclude from the compliance ratio determination any solvent and oilseed information recorded for the malfunction period.
 - (6) For sources processing cottonseed or specialty soybean, the solvent loss factor you use to determine the compliance ratio may change each operating month depending on the tons of oilseed processed during all normal operating periods in a 12 operating month period.
- (c) If the compliance ratio is less than or equal to 1.00, your source was in compliance with the HAP emission requirements for the previous operating month.
- (d) To determine the compliance ratio in Equation 2 of this section, you must select the appropriate oilseed solvent loss factor from Table 1 of this section.

COMPLIANCE REQUIREMENTS

§63.2850 How do I comply with the hazardous air pollutant emission standards?

- (a) General requirements. The requirements in paragraphs (a)(1)(i) through (iv) of this section apply to all affected sources:
- (1) Submit the necessary notifications in accordance with §63.2860, which include:
 - (i) Initial notifications for existing sources.
 - (ii) Initial notifications for new and reconstructed sources.
 - (iii) Initial notifications for significant modifications to existing or new sources.
 - (iv) Notification of compliance status.
 - (2) Develop and implement a plan for demonstrating compliance in accordance with §63.2851.

- (3) Develop a written startup, shutdown and malfunction (SSM) plan in accordance with the provisions in §63.2852.
- (4) Maintain all the necessary records you have used to demonstrate compliance with this subpart in accordance with §63.2862.
- (5) Submit the reports in paragraphs (a)(5)(i) through (iii) of this section:
 - (i) Annual compliance certifications in accordance with §63.2861(a).
 - (ii) Periodic SSM reports in accordance with §63.2861(c).
 - (iii) Immediate SSM reports in accordance with §63.2861(d).
- (6) Submit all notifications and reports and maintain all records required by the General Provisions for performance testing if you add a control device that destroys solvent.
- (b) *Existing sources under normal operation.* You must meet all of the requirements listed in paragraph (a) of this section and Table 1 of this section (see Appendix B of this permit) for sources under normal operation, and the schedules for demonstrating compliance for existing sources under normal operation in Table 2 of this section (see Appendix B of this permit).

§63.2851 What is a plan for demonstrating compliance?

- (a) You must develop and implement a written plan for demonstrating compliance that provides the detailed procedures you will follow to monitor and record data necessary for demonstrating compliance with this subpart. Procedures followed for quantifying solvent loss from the source and amount of oilseed processed vary from source to source because of site-specific factors such as equipment design characteristics and operating conditions. Typical procedures include one or more accurate measurement methods such as weigh scales, volumetric displacement, and material mass balances. Because the industry does not have a uniform set of procedures, you must develop and implement your own site-specific plan for demonstrating compliance before the compliance date for your source. You must also incorporate the plan for demonstrating compliance by reference in the source's title V permit and keep the plan on-site and readily available as long as the source is operational. If you make any changes to the plan for demonstrating compliance, then you must keep all previous versions of the plan and make them readily available for inspection for at least 5 years after each revision. The plan for demonstrating compliance must include the items in paragraphs (a)(1) through (7) of this section:
 - (1) The name and address of the owner or operator.
 - (2) The physical address of the vegetable oil production process.
 - (3) A detailed description of all methods of measurement your source will use to determine your solvent losses, HAP content of solvent, and the tons of each type of oilseed processed.
 - (4) When each measurement will be made.
 - (5) Examples of each calculation you will use to determine your compliance status. Include examples of how you will convert data measured with one parameter to other terms for use in compliance determination.
 - (6) Example logs of how data will be recorded.
 - (7) A plan to ensure that the data continue to meet compliance demonstration needs.

(b) The responsible agency of these NESHAP may require you to revise your plan for demonstrating compliance. The responsible agency may require reasonable revisions if the procedures lack detail, are inconsistent or do not accurately determine solvent loss, HAP content of the solvent, or the tons of oilseed processed.

§63.2852 What is a startup, shutdown, and malfunction plan?

You must develop a written SSM plan in accordance with §63.6(e)(3) and implement the plan, when applicable. You must complete the SSM plan before the compliance date for your source. You must also incorporate the SSM plan by reference in your source's title V permit and keep the SSM plan on-site and readily available as long as the source is operational. The SSM plan provides detailed procedures for operating and maintaining your source to minimize emissions during a qualifying SSM event for which the source chooses the §63.2850(e)(2) malfunction period, or the §63.2850(c)(2) or (d)(2) initial startup period. The SSM plan must specify a program of corrective action for malfunctioning process and air pollution control equipment and reflect the best practices now in use by the industry to minimize emissions. Some or all of the procedures may come from plans you developed for other purposes such as a Standard Operating Procedure manual or an Occupational Safety and Health Administration Process Safety Management plan. To qualify as a SSM plan, other such plans must meet all the applicable requirements of these NESHAP.

§63.2853 How do I determine the actual solvent loss?

By the end of each calendar month following an operating month, you must determine the total solvent loss in gallons for the previous operating month. The total solvent loss for an operating month includes all solvent losses that occur during normal operating periods within the operating month. If you have determined solvent losses for 12 or more operating months, then you must also determine the 12 operating months rolling sum of actual solvent loss in gallons by summing the monthly actual solvent loss for the previous 12 operating months. The 12 operating months rolling sum of solvent loss is the "actual solvent loss," which is used to calculate your compliance ratio as described in §63.2840.

- (a) To determine the actual solvent loss from your source, follow the procedures in your plan for demonstrating compliance to determine the items in paragraphs (a)(1) through (7) of this section:

(1) The dates that define each operating status period during a calendar month.

The dates that define each operating status period include the beginning date of each calendar month and the date of any change in the source operating status. If the source maintains the same operating status during an entire calendar month, these dates are the beginning and ending dates of the calendar month. If, prior to the effective date of this rule, your source determines the solvent loss on an accounting month, as defined in §63.2872, rather than a calendar month basis, and you have 12 complete accounting months of approximately equal duration in a calendar year, you may substitute the accounting month time interval for the calendar month time interval. If you choose to use an accounting month rather than a calendar month, you must document this measurement frequency selection in your plan for demonstrating compliance, and you must remain on this schedule unless you request and receive written approval from the agency responsible for these NESHAP.

- (2) Source operating status. You must categorize the operating status of your source for each recorded time interval in accordance with criteria in Table 1 of this section, as follows:

Table 1 of §63.2853 – Categorizing Your Source Operating Status

If during a recorded time interval...	then your source operating status is...
(i) your source processes any amount of listed oilseed and your source is not operating under an initial startup period or a malfunction period subject to §63.2850(c)(2), (d)(2), or (e)(2)	a normal operating period.
(ii) your source processes no agricultural product and your source is not operating under an initial startup period or malfunction period subject to §63.2850(c)(2), (d)(2), or (e)(2)	a nonoperating period.
(iii) you choose to operate your source under an initial startup period subject to §63.2850(c)(2) or (d)(2)	an initial startup period.
(iv) you choose to operate your source under a malfunction period subject to §63.2850(e)(2)	a malfunction period.
(v) your source processes agricultural products not defined as listed oilseed	an exempt period.

- (3) Measuring the beginning and ending solvent inventory. You are required to measure and record the solvent inventory on the beginning and ending dates of each normal operating period that occurs during an operating month. An operating month is any calendar month with at least one normal operating period. You must consistently follow the procedures described in your plan for demonstrating compliance, as specified in §63.2851, to determine the extraction solvent inventory, and maintain readily available records of the actual solvent loss inventory, as described in §63.2862(c)(1). In general, you must measure and record the solvent inventory only when the source is actively processing any type of agricultural product. When the source is not active, some or all of the solvent working capacity is transferred to solvent storage tanks which can artificially inflate the solvent inventory.
- (4) Gallons of extraction solvent received. Record the total gallons of extraction solvent received in each shipment. For most processes, the gallons of solvent received represents purchases of delivered solvent added to the solvent storage inventory. However, if your process refines additional vegetable oil from off-site sources, recovers solvent from the off-site oil, and adds it to the on-site solvent inventory, then you must determine the quantity of recovered solvent and include it in the gallons of extraction solvent received.
- (5) Solvent inventory adjustments. In some situations, solvent losses determined directly from the measured solvent inventory and quantity of solvent received is not an accurate estimate of the “actual solvent loss” for use in determining compliance ratios. In such cases, you may adjust the total solvent loss for each normal operating period as long as you provide a reasonable justification for the adjustment. Situations that may require adjustments of the total solvent loss include, but are not limited to, situations in paragraph (a)(5) (ii) of this section:
- (ii) Changes in solvent working capacity. In records you keep on-site, document any process modifications resulting in changes to the solvent working capacity in your vegetable oil production process. Solvent working capacity is defined in §63.2872. In general, solvent working capacity is the volume of solvent normally retained in solvent recovery equipment such as the extractor, desolventizer-toaster, solvent storage, working tanks, mineral oil absorber, condensers, and oil/solvent distillation system. If the change occurs during a normal operating period, you must determine the difference in working solvent volume and make a one-time documented adjustment to the solvent inventory.
- (b) Use Equation 1 of this section to determine the actual solvent loss occurring from your affected source for all normal operating periods recorded within a calendar month. Equation 1 of this section follows:

Monthly Actual

$$\text{Solvent Loss (gal)} = \sum_{i=1}^n (\text{SOLV}_B - \text{SOLV}_E + \text{SOLV}_R \pm \text{SOLV}_A)_i \quad \text{Equation 1}$$

Where:

SOLV_B = Gallons of solvent in the inventory at the beginning of normal operating period “i” as determined in paragraph (a)(3) of this section.

$SOLV_E$ = Gallons of solvent in the inventory at the end of normal operating period “i” as determined in paragraph (a)(3) of this section.

$SOLV_R$ = Gallons of solvent received between the beginning and ending inventory dates of normal operating period “i” as determined in paragraph (a)(4) of this section.

$SOLV_A$ = Gallons of solvent added or removed from the extraction solvent inventory during normal operating period “i” as determined in paragraph (a)(5) of this section.

N = Number of normal operating periods in a calendar month.

(c) The actual solvent loss is the total solvent losses during normal operating periods for the previous 12 operating months. You determine your actual solvent loss by summing the monthly actual solvent losses for the previous 12 operating months. You must record the actual solvent loss by the end of each calendar month following an operating month. Use the actual solvent loss in Equation 2 of §63.2840 to determine the compliance ratio. Actual solvent loss does not include losses that occur during operating status periods listed in paragraphs (c)(1) through (4) of this section. If any one of these four operating status periods span an entire month, then the month is treated as nonoperating and there is no compliance ratio determination.

(1) Nonoperating periods as described in paragraph (a)(2)(ii) of this section.

(2) Initial startup periods as described in §63.2850(c)(2) or (d)(2).

(3) Malfunction periods as described in §63.2850(e)(2).

(4) Exempt operation periods as described in paragraph (a)(2)(v) of this section.

§63.2854 How do I determine the weighted average volume fraction of HAP in the actual solvent loss?

(a) This section describes the information and procedures you must use to determine the weighted average volume fraction of HAP in extraction solvent received for use in your vegetable oil production process. By the end of each calendar month following an operating month, determine the weighted average volume fraction of HAP in extraction solvent received since the end of the previous operating month. If you have determined the monthly weighted average volume fraction of HAP in solvent received for 12 or more operating months, then also determine an overall weighted average volume fraction of HAP in solvent received for the previous 12 operating months. Use the volume fraction of HAP determined as a 12 operating months weighted average in Equation 2 of §63.2840 to determine the compliance ratio.

(b) To determine the volume fraction of HAP in the extraction solvent determined as a 12 operating months weighted average, you must comply with paragraphs (b)(1) through (3) of this section:

- (1) Record the volume fraction of each HAP comprising more than 1 percent by volume of the solvent in each delivery of solvent, including solvent recovered from off-site oil. To determine the HAP content of the material in each delivery of solvent, the reference method is EPA Method 311 of appendix A of this part. You may use EPA Method 311, an approved alternative method, or any other reasonable means for determining the HAP content. Other reasonable means of determining HAP content include, but are not limited to, a material safety data sheet or a manufacturer's certificate of analysis. A certificate of analysis is a legal and binding document provided by a solvent manufacturer. The purpose of a certificate of analysis is to list the test methods and analytical results that determine chemical properties of the solvent and the volume percentage of all HAP components present in the solvent at quantities greater than 1 percent by volume. You are not required to test the materials that you use, but the Administrator may require a test using EPA Method 311 (or an approved alternative method) to confirm the reported HAP content. However, if the results of an analysis by EPA Method 311 are different from the HAP content determined by another means, the EPA Method 311 results will govern compliance determinations.
- (2) Determine the weighted average volume fraction of HAP in the extraction solvent each operating month. The weighted average volume fraction of HAP for an operating month includes all solvent received since the end of the last operating month, regardless of the operating status at the time of the delivery. Determine the monthly weighted average volume fraction of HAP by summing the products of the HAP volume fraction of each delivery and the volume of each delivery and dividing the sum by the total volume of all deliveries as expressed in Equation 1 of this section. Record the result by the end of each calendar month following an operating month. Equation 1 of this section follows:

$$\begin{array}{l} \text{Monthly Weighted} \\ \text{Average HAP Content} \\ \text{of Extraction Solvent} \\ \text{(volume fraction)} \end{array} = \frac{\sum_{i=1}^n (\text{Received}_i * \text{Content}_i)}{\text{Total Received}} \quad \text{Equation 1}$$

Where:

Received_i = Gallons of extraction solvent received in delivery “i.”

Content_i = The volume fraction of HAP in extraction solvent delivery “i.”

Total Received = Total gallons of extraction solvent received since the end of the previous operating month.

N = Number of extraction solvent deliveries since the end of the previous operating month.

(3) Determine the volume fraction of HAP in your extraction solvent as a 12 operating months weighted average. When your source has processed oilseed for 12 operating months, sum the products of the monthly weighted average HAP volume fraction and corresponding volume of solvent received, and divide the sum by the total volume of solvent received for the 12 operating months, as expressed by Equation 2 of this section. Record the result by the end of each calendar month following an operating month and use it in Equation 2 of §63.2840 to determine the compliance ratio. Equation 2 of this section follows:

$$\begin{array}{l} \text{12 - Month Weighted} \\ \text{Average of HAP Content} \\ \text{in Solvent Received} \\ \text{(volume fraction)} \end{array} = \frac{\sum_{i=1}^{12} (\text{Received}_i * \text{Content}_i)}{\text{Total Received}} \quad \text{Equation 2}$$

Where:

Received_i = Gallons of extraction solvent received in operating month “i” as determined in accordance with §63.2853(a)(4).

Content_i = Average volume fraction of HAP in extraction solvent received in operating month “i” as determined in accordance with paragraph (b)(1) of this section.

Total Received = Total gallons of extraction solvent received during the previous 12 operating months.

§63.2855 How do I determine the quantity of oilseed processed?

All oilseed measurements must be determined on an as received basis, as defined in §63.2872. The as received basis refers to the oilseed chemical and physical characteristics as initially received by the source and prior to any oilseed handling and processing. By the end of each calendar month following an operating month, you must determine the tons as received of each listed oilseed processed for the operating month. The total oilseed processed for an operating month includes the total of each oilseed processed during all normal operating periods that occur within the operating month. If you have determined the tons of oilseed processed for 12 or more operating months, then you must also determine the 12 operating months rolling sum of each type oilseed processed by summing the tons of each type of oilseed processed for the previous 12 operating months. The 12 operating months rolling sum of each type of oilseed processed is used to calculate the compliance ratio as described in §63.2840.

- (a) To determine the tons as received of each type of oilseed processed at your source, follow the procedures in your plan for demonstrating compliance to determine the items in paragraphs (a)(1) through (5) of this section:
- (1) The dates that define each operating status period. The dates that define each operating status period include the beginning date of each calendar month and the date of any change in the source operating status. If, prior to the effective date of this rule, your source determines the oilseed inventory on an accounting month rather than a calendar month basis, and you have 12 complete accounting months of approximately equal duration in a calendar year, you may substitute the accounting month time interval for the calendar month time interval. If you choose to use an accounting month rather than a calendar month, you must document this measurement frequency selection in your plan for demonstrating compliance, and you must remain on this schedule unless you request and receive written approval from the agency responsible for these NESHAP. The dates on each oilseed inventory log must be consistent with the dates recorded for the solvent inventory.
 - (2) Source operating status. You must categorize the source operation for each recorded time interval. The source operating status for each time interval recorded on the oilseed inventory for each type of oilseed must be consistent with the operating status recorded on the solvent inventory logs as described in §63.2853(a)(2).
 - (3) Measuring the beginning and ending inventory for each oilseed. You are required to measure and record the oilseed inventory on the beginning and ending dates of each normal operating period that occurs during an operating month. An operating month is any calendar month with at least one normal operating period. You must consistently follow the procedures described in your plan for demonstrating compliance, as specified in §63.2851, to determine the oilseed inventory on an as received basis and maintain readily available records of the oilseed inventory as described by §63.2862(c)(3).
 - (4) Tons of each oilseed received. Record the type of oilseed and tons of each shipment of oilseed received and added to your on-site storage.
 - (5) Oilseed inventory adjustments. In some situations, determining the quantity of oilseed processed directly from the measured oilseed inventory and quantity of oilseed received is not an accurate estimate of the tons of oilseed processed for use in determining compliance ratios. For example, spoiled and molded oilseed removed from storage but not processed by your source will result in an overestimate of the quantity of oilseed processed. In such cases, you must adjust the oilseed inventory and provide a justification for the adjustment. Situations that may require oilseed inventory adjustments include, but are not limited to, the situations listed in paragraphs (a)(5)(i) through (v) of this section:
 - (i) Oilseed that mold or otherwise become unsuitable for processing.
 - (ii) Oilseed you sell before it enters the processing operation.
 - (iii) Oilseed destroyed by an event such as a process malfunction, fire, or natural disaster.

(iv) Oilseed processed through operations prior to solvent extraction such as screening, dehulling, cracking, drying, and conditioning; but that are not routed to the solvent extractor for further processing.

(v) Periodic physical measurements of inventory. For example, some sources periodically empty oilseed storage silos to physically measure the current oilseed inventory. This periodic measurement procedure typically results in a small inventory correction. The correction factor, usually less than 1 percent, may be used to make an adjustment to the source's oilseed inventory that was estimated previously with indirect measurement techniques. To make this adjustment, your plan for demonstrating compliance must provide for such an adjustment.

- (b) Use Equation 1 of this section to determine the quantity of each oilseed type processed at your affected source during normal operating periods recorded within a calendar month. Equation 1 of this section follows:

Monthly Quantity

$$\text{of Each Oilseed Processed (tons)} = \sum_{n=1}^n (\text{SEED}_B - \text{SEED}_E + \text{SEED}_R \pm \text{SEED}_A)$$

Where:

SEED_B = Tons of oilseed in the inventory at the beginning of normal operating period “i” as determined in accordance with paragraph (a)(3) of this section.

SEED_E = Tons of oilseed in the inventory at the end of normal operating period “i” as determined in accordance with paragraph (a)(3) of this section.

SEED_R = Tons of oilseed received during normal operating period “i” as determined in accordance with paragraph (a)(4) of this section.

SEED_A = Tons of oilseed added or removed from the oilseed inventory during normal operating period “i” as determined in accordance with paragraph (a)(5) of this section.

N = Number of normal operating periods in the calendar month during which this type oilseed was processed.

(c) The quantity of each oilseed processed is the total tons of each type of listed oilseed processed during normal operating periods in the previous 12 operating months. You determine the tons of each oilseed processed by summing the monthly quantity of each oilseed processed for the previous 12 operating months. You must record the 12 operating months quantity of each type of oilseed processed by the end of each calendar month following an operating month. Use the 12 operating months quantity of each type of oilseed processed to determine the compliance ratio as described in §63.2840. The quantity of oilseed processed does not include oilseed processed during the operating status periods in paragraphs (c)(1) through (4) of this section:

- (1) Nonoperating periods as described in §63.2853 (a)(2)(ii).
- (2) Initial startup periods as described in §63.2850(c)(2) or (d)(2).
- (3) Malfunction periods as described in §63.2850(e)(2).
- (4) Exempt operation periods as described in §63.2853 (a)(2)(v).
- (5) If any one of these four operating status periods span an entire calendar month, then the calendar month is treated as a nonoperating month and there is no compliance ratio determination.

NOTIFICATIONS, REPORTS, AND RECORDS

§63.2860 What notifications must I submit and when?

- (a) **Initial notification for existing sources.** For an existing source, submit an initial notification to the agency responsible for these NESHAP no later than 120 days after the effective date of this subpart. In the notification, include the items in paragraphs (a)(1) through (5) of this section:
- (1) The name and address of the owner or operator.
 - (2) The physical address of the vegetable oil production process.
 - (3) Identification of the relevant standard, such as the vegetable oil production NESHAP, and compliance date.
 - (4) A brief description of the source including the types of listed oilseeds processed, nominal operating capacity, and type of desolventizer(s) used.
 - (5) A statement designating the source as a major source of HAP or a demonstration that the source meets the definition of an area source. An area source is a source that is not a major source and is not collocated within a plant site with other sources that are individually or collectively a major source.
- (c) **Significant modification notifications.** Any existing or new source that plans to undergo a significant modification as defined in §63.2872 must submit two reports as described in paragraphs 63.2860(c)(1) and (2).
- (d) **Notification of compliance status.** As an existing, new, or reconstructed source, you must submit a notification of compliance status report to the responsible agency no later than 60 days after determining your initial 12 operating months compliance ratio. If you are an existing source, you generally must submit this notification no later than 50 calendar months after the effective date of these NESHAP (36 calendar months for compliance, 12 operating months to record data, and 2 calendar months to complete the report). The notification of compliance status must contain the items in paragraphs (d)(1) through (6) of this section:
- (1) The name and address of the owner or operator.
 - (2) The physical address of the vegetable oil production process.
 - (3) Each listed oilseed type processed during the previous 12 operating months.
 - (4) Each HAP identified under §63.2854(a) as being present in concentrations greater than 1 percent by volume in each delivery of solvent received during the 12 operating months period used for the initial compliance determination.
 - (5) A statement designating the source as a major source of HAP or a demonstration that the source qualifies as an area source. An area source is a source that is not a major source and is not collocated within a plant site with other sources that are individually or collectively a major source.
 - (6) A compliance certification indicating whether the source complied with all of the requirements of this subpart throughout the 12 operating months used for the initial source compliance determination. This certification must include a certification of the items in paragraphs (d)(6)(i) through (iii) of this section:
 - (i) The plan for demonstrating compliance (as described in §63.2851) and SSM plan (as described in §63.2852) are complete and available on-site for inspection.

(ii) You are following the procedures described in the plan for demonstrating compliance.

(iii) The compliance ratio is less than or equal to 1.00.

§63.2861 What reports must I submit and when?

(a) Annual compliance certifications. The first annual compliance certification is due 12 calendar months after you submit the notification of compliance status. Each subsequent annual compliance certification is due 12 calendar months after the previous annual compliance certification. The annual compliance certification provides the compliance status for each operating month during the 12 calendar months period ending 60 days prior to the date on which the report is due. Include the information in paragraphs (a)(1) through (6) of this section in the annual certification:

(1) The name and address of the owner or operator.

(2) The physical address of the vegetable oil production process.

(3) Each listed oilseed type processed during the 12 calendar months period covered by the report.

(4) Each HAP identified under §63.2854(a) as being present in concentrations greater than 1 percent by volume in each delivery of solvent received during the 12 calendar months period covered by the report.

(5) A statement designating the source as a major source of HAP or a demonstration that the source qualifies as an area source. An area source is a source that is not a major source and is not collocated within a plant site with other sources that are individually or collectively a major source.

(6) A compliance certification to indicate whether the source was in compliance for each compliance determination made during the 12 calendar months period covered by the report. For each such compliance determination, you must include a certification of the items in paragraphs (a)(6)(i) through (ii) of this section:

(i) You are following the procedures described in the plan for demonstrating compliance.

(ii) The compliance ratio is less than or equal to 1.00.

(b) Deviation notification report. Submit a deviation report for each compliance determination you make in which the compliance ratio exceeds 1.00 as determined under §63.2840(c). Submit the deviation report by the end of the month following the calendar month in which you determined the deviation. The deviation notification report must include the items in paragraphs (b)(1) through (4) of this section:

(1) The name and address of the owner or operator.

(2) The physical address of the vegetable oil production process.

(3) Each listed oilseed type processed during the 12 operating months period for which you determined the deviation.

(4) The compliance ratio comprising the deviation. You may reduce the frequency of submittal of the deviation notification report if the agency responsible for these NESHAP does not object as provided in §63.10(e)(3)(iii).

(d) Immediate SSM reports. If you handle a SSM during an initial startup period subject to §63.2850(c)(2) or (d)(2) or a malfunction period subject to §63.2850(e)(2) differently from procedures in the SSM plan, then you must submit an immediate SSM report as defined in 63.2861(d)(1) through (3).

§63.2862 What records must I keep?

- (a) You must satisfy the recordkeeping requirements of this section by April 12, 2004.
- (b) Prepare a plan for demonstrating compliance (as described in §63.2851) and a SSM plan (as described in §63.2852). In these two plans, describe the procedures you will follow in obtaining and recording data, and determining compliance under normal operations or a SSM subject to the §63.2850(c)(2) or (d)(2) initial startup period or the §63.2850(e)(2) malfunction period. Complete both plans before the compliance date for your source and keep them on-site and readily available as long as the source is operational.
- (c) If your source processes any listed oilseed, record the items in paragraphs (c)(1) through (5) of this section:
 - (1) For the solvent inventory, record the information in paragraphs (c)(1)(i) through (vii) of this section in accordance with your plan for demonstrating compliance:
 - (i) Dates that define each operating status period during a calendar month.
 - (ii) The operating status of your source such as normal operation, nonoperating, initial startup period, malfunction period, or exempt operation for each recorded time interval.
 - (iii) Record the gallons of extraction solvent in the inventory on the beginning and ending dates of each normal operating period.
 - (iv) The gallons of all extraction solvent received, purchased, and recovered during each calendar month.
 - (v) All extraction solvent inventory adjustments, additions or subtractions. You must document the reason for the adjustment and justify the quantity of the adjustment.
 - (vi) The total solvent loss for each calendar month, regardless of the source operating status.
 - (vii) The actual solvent loss in gallons for each operating month.
 - (2) For the weighted average volume fraction of HAP in the extraction solvent, you must record the items in paragraphs (c)(2)(i) through (iii) of this section:
 - (i) The gallons of extraction solvent received in each delivery.
 - (ii) The volume fraction of each HAP exceeding 1 percent by volume in each delivery of extraction solvent.
 - (iii) The weighted average volume fraction of HAP in extraction solvent received since the end of the last operating month as determined in accordance with §63.2854(b)(2).
 - (3) For each type of listed oilseed processed, record the items in paragraphs (c)(3)(i) through (vi) of this section, in accordance with your plan for demonstrating compliance:
 - (i) The dates that define each operating status period. These dates must be the same as the dates entered for the extraction solvent inventory.
 - (ii) The operating status of your source such as normal operation, nonoperating, initial startup period, malfunction period, or exempt operation for each recorded time interval. On the log for each type of listed oilseed that is not being processed during a normal operating period, you must record which type of listed oilseed is being processed in addition to the source operating status.

- (iii) The oilseed inventory for the type of listed oilseed being processed on the beginning and ending dates of each normal operating period.
 - (iv) The tons of each type of listed oilseed received at the affected source each normal operating period.
 - (v) All listed oilseed inventory adjustments, additions or subtractions for normal operating periods. You must document the reason for the adjustment and justify the quantity of the adjustment.
 - (vi) The tons of each type of listed oilseed processed during each operating month.
- (d) After your source has processed listed oilseed for 12 operating months, and you are not operating during an initial startup period as described in §63.2850(c)(2) or (d)(2), or a malfunction period as described in §63.2850(e)(2), record the items in paragraphs (d)(1) through (5) of this section by the end of the calendar month following each operating month:
- (1) The 12 operating months rolling sum of the actual solvent loss in gallons as described in §63.2853(c).
 - (2) The weighted average volume fraction of HAP in extraction solvent received for the previous 12 operating months as described in §63.2854(b)(3).
 - (3) The 12 operating months rolling sum of each type of listed oilseed processed at the affected source in tons as described in §63.2855(c).
 - (4) A determination of the compliance ratio. Using the values from §63.2853, 63.2854, 63.2855, and Table 1 of §63.2840, calculate the compliance ratio using Equation 2 of §63.2840.
 - (5) A statement of whether the source is in compliance with all of the requirements of this subpart. This includes a determination of whether you have met all of the applicable requirements in §63.2850.
- (e) For each SSM event subject to an initial startup period as described in §63.2850(c)(2) or (d)(2), or a malfunction period as described in §63.2850(e)(2), record the items in paragraphs (e)(1) through (3) of this section by the end of the calendar month following each month in which the initial startup period or malfunction period occurred:
- (1) A description and date of the SSM event, its duration, and reason it qualifies as an initial startup or malfunction.
 - (2) An estimate of the solvent loss in gallons for the duration of the initial startup or malfunction period with supporting documentation.
 - (3) A checklist or other mechanism to indicate whether the SSM plan was followed during the initial startup or malfunction period.

§63.2863 In what form and how long must I keep my records?

- (a) Your records must be in a form suitable and readily available for review in accordance with §63.10(b)(1).
- (b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
- (c) You must keep each record on-site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, in accordance with §63.10(b)(1). You can keep the records off-site for the remaining 3 years.

Subpart A – General Provisions

§40 CFR 63.4, Prohibited Activities and Circumvention:

(a) Prohibited Activities.

- (1) The permittee shall not operate any affected source in violation of the requirements of this part except under:
 - (i) An extension of compliance granted by the Administrator under this part; or
 - (ii) An extension of compliance granted under this part by a State with an approved permit program; or
 - (iii) An exemption from compliance is granted by the President under section 112(i)(4) of the Clean Air Act.

(2) The permittee shall not fail to keep records, notify, report, or revise reports as required under this part.

(b) Circumvention. The permittee shall not build, erect, install, or use any article, machine, equipment, or process to conceal an emission that would otherwise constitute noncompliance with a relevant standard. Such concealment includes, but is not limited to:

- (1) The use of diluents to achieve compliance with a relevant standard based on the concentration of a pollutant in the effluent discharged to the atmosphere.
- (2) The use of gaseous diluents to achieve compliance with a relevant standard for visible emissions.
- (3) The fragmentation of an operation such that the operation avoids regulation by a relevant standard.

(c) Severability. Notwithstanding any requirement incorporated into a Title V permit obtained by an owner or operator subject to the provisions of this part, the provisions of this part are federally enforceable.

§40 CFR 63.6, Compliance with standards and maintenance requirements

(e) Operation and maintenance requirements.

- (1)(i) At all times, including periods of startup, shutdown, and malfunction, the permittee shall operate and maintain any affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by all relevant standards.
- (2)(i) Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to the Administrator, which may include, but is not limited to, monitoring results, review of operation and maintenance procedures (including the startup, shutdown, and malfunction plan, review of operation and maintenance records, and inspection of the source).

Authority for Requirement: 40 CFR 63 Subpart GGGG and Subpart A (General Provisions)

Compliance Plan

The owner/operator of this equipment shall comply with the applicable requirements listed below.

With the exception(s) listed below, this point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.

Archer Daniels Midland (ADM) has entered into a Consent Decree with the United States EPA and 14 state and local air programs (Including the State of Iowa and Polk County Air Quality Division) in order to resolve a number of alleged violations at its 43 facilities located in 16 states. Included in this Consent Decree is the Soybean processing plant in Des Moines, Iowa. ADM shall meet all requirements of the Consent Decree, Including among the requirements listed in the Plant-Wide Conditions in this Permit.

Authority for Requirement: Consent Decree C.D. IL, #03-CV-2066
567 IAC 22.108(1)
567 IAC 23.1(4)"cg"

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

I. Background

A. Emissions Unit

Description: Final Vent and Fugitives
Identification: EP GP09
Facility: ADM, Des Moines

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.: 40 CFR Part 63 Subpart GGGG
City of Des Moines Construction Permit #0093
567 IAC 23.1(4)"cg"

Hexane emission limit: 708.95 tons/yr
n-Hexane emission limit: 453.72 tons/yr
Monitoring Requirements: Mineral oil scrubber operating parameters.

- C. Control Technology
Mineral oil scrubber (MOS)

II. Monitoring Approach

- A. Indicators
Calculated 12-month rolling total hexane losses, mineral oil temperature and rate will be used as indicators.
- B. Measurement Approach
Mass-balance calculations will use the facility's hexane purchase records. The scrubber's mineral oil flow rate and temperature are monitored.
- C. Indicator Ranges
The indicator levels for the scrubber are a mineral oil flow rate not less than 10 gallons per minute into the absorber and a mineral oil temperature not less than 180 degrees F into the stripper. These indicator levels are during normal operations and do not include periods of startup or shutdown of the mineral oil system
- D. QIP (Quality Improvement Plan) Threshold
The QIP thresholds are six excursions total of either the mineral oil flow rate or the mineral oil temperature in one six month reporting period or one instance of 12-month rolling VOC emissions greater than 708.95 tons. The 12-month rolling totals will be recalculated and recorded each month.
- E. Performance Criteria

Data representativeness: The mineral oil scrubber is designed to operate at maximum control efficiency at specific mineral oil flow rate and temperature ranges. Oil flow entering the absorber shall be measured for flow rate and temperature shall be measured in the oil entering the stripper. These parameters are recorded a minimum of once per day. If the flow rate or temperature have drifted out of the optimal efficiency range, this is an indication of the potential for increased hexane emissions. Facility hexane losses, determined from hexane make-up solvent purchases, is representative of the scrubber's operation.

Verification of operational status: Mineral oil flow rate and temperature are monitored to insure proper operation of the mineral oil scrubber. The mineral oil system will be maintained in good working condition according to the appropriate O&M procedures.

QA/QC practices and criteria: Monitoring the mineral oil flow rate and temperature will serve to alert the facility in circumstances when the mineral oil scrubber experiences short-term excursions. Any recorded flow rate or temperature outside of the indicator range during normal operations will signify an excursion. Normal operations do not include periods of startup or shutdown of the mineral oil system.

When an excursion occurs, corrective action will be initiated within 8 hours, beginning with an evaluation of the occurrence to determine the action required. After any necessary corrective action has been taken, a follow-up check will be performed to insure that the indicator is within the indicator range.

Monitoring frequency and data collection procedures: The mineral oil flow rate and temperature sensors provide real-time readings which are recorded a minimum of once per day when the facility's emission unit is in operation. Facility hexane losses will be calculated using material mass balance. Hexane losses will be assumed to equal all new hexane purchases made to maintain the facility's inventory. Each month, the facility calculates and records the 12-month rolling total hexane emissions for the facility.

III. Justification

A. Background

This facility processes various oilseeds to extract vegetable oils. The pollutant specific emission unit is the seed oil extraction and refinement unit that uses hexane as solvent. Hexane emissions are controlled by a Mineral Oil Scrubber.

B. Rationale for Selection of Performance Indicator

The scrubber's mineral oil flow rate and temperature were selected as the performance indicators as they are indicative of operation of the scrubber in a manner necessary to maximize collection and reuse of hexane and minimize emissions. An excursion of these indicators out of the optimal operating range indicates a possibility of reduced performance of the scrubber.

Facility 12-month rolling total hexane emissions are used as long-term performance indicator.

C. Rationale for Selection of Indicator Level

The mineral oil flow rate into the absorber is ≥ 10 gallons per minute and the mineral oil temperature into the stripper is $\geq 180^{\circ}\text{F}$. These indicator ranges were selected because operation of the scrubber outside the optimal ranges for these parameters is indicative of a potential for increased hexane emissions.

The selected QIP thresholds are six excursions total of either the mineral oil flow rate or the mineral oil temperature in one six month reporting period or one instance in which the facility's 12-month rolling VOC emissions exceed 708.95 tons. The 12-month rolling totals will be recalculated and recorded each month. This level is the facility's permitted annual emissions limit for hexane. If a QIP threshold is exceeded once, a QIP will be developed and implemented.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: GP011 – Material conveying

Associated Equipment

Associated Emission Unit ID Numbers: GP011
Emissions Control Equipment ID Number: GP011
Emissions Control Equipment Description: Carter Day Baghouse

Applicable Requirements

Emission Unit vented through this Emission Point: GP011
Emission Unit Description: Prep tank, P1 Drag, P6 Leg, Prep Scalper, Sprout Aspirator, P3 Leg and P7 Drag
Raw Material/Fuel: Soybeans
Rated Capacity: 194 Tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: None allowed

Authority for Requirement: Polk County Construction Permit #1658
Polk County Board of Health Rules and Regulations
Chapter V, Article X, Section 5-31

Pollutant: PM/ PM10

Emission Limits: 0.01 gr/dscf
1.34 lb/hr
5.89 Ton/year

Authority for Requirement: Polk County Construction Permit #1658

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

EP GP011 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity >0% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: GP013 – Emergency Lighting Generator

Applicable Requirements

Emission Unit vented through this Emission Point: GP013

Emission Unit Description: Emergency Generator

Raw Material/Fuel: Natural Gas

Rated Capacity: 0.32 MMBTU/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: <20%

Authority for Requirement: Polk County Board of Health Rules and Regulations
Chapter V, Section 5-9

Pollutant: PM

Emission Limit: 0.6 lb/MMBTU

Authority for Requirement: 567 IAC 23.3 (2) “b”

Pollutant: SO₂

Emission Limit: 500 ppmv

Authority for Requirement: 567 IAC 23.3 (3) “e”

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3) “b”

Emission Point ID Number: GP015 Prep Building Central Vacuum Cleaning System

Associated Equipment

Associated Emission Unit ID Numbers: GP015

Emissions Control Equipment ID Number: GP015

Emissions Control Equipment Description: Kice Metal Products Model R16-6 Bag Filter

Applicable Requirements

Emission Unit vented through this Emission Point: GP015 Prep Vacuum System

Emission Unit Description: Prep Vacuum Cleaning System

Raw Material/Fuel: Soybean dust

Rated Capacity: 2500 lb/hr (engineering estimate)

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: <20%

Authority for Requirement: Polk County Board of Health Rules and Regulations
Chapter V, Section 5-9
City of Des Moines Construction Permit #0092

Pollutant: PM

Emission Limit: 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.4(7) Standards for Grain Handling and
Processing Plants.
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-16
City of Des Moines Construction Permit #0092

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

EPGP015 shall be visually checked for observable emissions once every month by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity >20% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: HR01 – Hull Gravity Tables/Secondary Aspiration

Associated Equipment

Associated Emission Unit ID Numbers: HR01

Emissions Control Equipment ID Number: HR01

Emissions Control Equipment Description: Carter Day Baghouse Model # 144RJ96

Applicable Requirements

Emission Unit vented through this Emission Point: HR01

Emission Unit Description: De-hulling/Secondary Aspiration

Raw Material/Fuel: Hulls/Bean Meat

Rated Capacity: 150 (as beans) Tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: <20%

Authority for Requirement: City of Des Moines Construction Permit #0087
Polk County Rules and Regulations Chapter V Section 5-9

Pollutant: PM

Emission Limit: 0.1 gr/scf

Authority for Requirement: City of Des Moines Construction Permit #0087
567 IAC 23.4(7) Standards for Grain Handling and Processing Plants.
Polk County Board of Health Rules and Regulations Chapter V, Section 5-16

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

EP HR01 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity $\geq 20\%$ is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: HR02 – Hull Grinding

Associated Equipment

Associated Emission Unit ID Numbers: HR02

Emissions Control Equipment ID Number: HR02

Emissions Control Equipment Description: Carter Day Baghouse Model # 72RJ96

Applicable Requirements

Emission Unit vented through this Emission Point: HR02

Emission Unit Description: Hull Grinding

Raw Material/Fuel: Hulls

Rated Capacity: 18.75 Tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: <20%

Authority for Requirement: City of Des Moines Construction Permit #0100
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-9

Pollutant: PM

Emission Limit: 0.1 gr/scf

Authority for Requirement: City of Des Moines Construction Permit #0100
567 IAC 23.4(7) Standards for Grain Handling and
Processing Plants.
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-16

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

EP HR02 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity $\geq 20\%$ is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: HR03 – Pellet Cooler

Associated Equipment

Associated Emission Unit ID Numbers: HR03

Emissions Control Equipment ID Number: HR03

Emissions Control Equipment Description: Carter Day Cyclone Model #HV74

Applicable Requirements

Emission Unit vented through this Emission Point: HR03

Emission Unit Description: Pellet Cooler

Raw Material/Fuel: Hulls

Rated Capacity: 11 Tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: <20%

Authority for Requirement: State of Iowa Construction Permit 88-A-084
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-9

Pollutant: PM

Emission Limits: 0.01 gr/dscf
1.1 lb/hr

Authority for Requirement: State of Iowa Construction Permit 88-A-084

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Exhaust Flow Rate: Shall not exceed 13,000 scf/m

Authority for Requirement: State of Iowa Construction Permit 88-A-084

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Stack Testing:

Pollutant - PM

Stack Test to be completed by – No later than December 14, 2006

Test Method – Iowa Compliance Sampling Manual Method 5

Authority for Requirement – 567 IAC 22.108(3)

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

EP HR03 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity $\geq 20\%$ is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: HR04 – Hull/ Pellet Storage

Applicable Requirements

Emission Unit vented through this Emission Point: HR04

Emission Unit Description: Hull/Pellet storage

Raw Material/Fuel: Hulls

Rated Capacity: 18.75 Tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: <20%

Authority for Requirement: State of Iowa Construction Permit #88-A-084
Polk County Rules Board of Health Rules and Regulations
Chapter V, Section 5-9

Pollutant: PM

Emission Limit: 0.1 gr/scf

Authority for Requirement: State of Iowa Construction Permit #88-A-084
567 IAC 23.4(7) Standards for Grain Handling and
Processing Plants.
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-16

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

EP HR04 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity $\geq 20\%$ is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

**Emission Point ID Number: MP01a, MP01b, MP01c, MP01d, MP01e –
Desolventizer Toaster Dryer/Cooler (DTDC)**

Associated Equipment

EP	EU	CE ID #	Control Equipment Description
MP01a MP01e	MP01	CEMP01a	1 of 4 cyclones in parallel
MP01b	MP01	CEMP01b	1 of 4 cyclones in parallel
MP01c	MP01	CEMP01c	1 of 4 cyclones in parallel
MP01d	MP01	CEMP01d	1 of 4 cyclones in parallel

Applicable Requirements

Emission Unit vented through this Emission Point: MP01
Emission Unit Description: Desolventizer Toaster/Dryer/ Cooler
Raw Material/Fuel: Meal
Rated Capacity: 143.8 Tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from each emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: <20%

Authority for Requirement: Polk County Construction Permit #1626modified
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-9

Pollutant: PM

Emission Limit: 0.1 gr/scf

Authority for Requirement: Polk County Construction Permit #1626modified
567 IAC 23.4(7) Standards for Grain Handling and
Processing Plants.
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-16

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

EP MP01a, b, c, d and e shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity $\geq 20\%$ is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: MP02 – Meal Grinding

Associated Equipment

Associated Emission Unit ID Number: MP02

Emissions Control Equipment ID Number: MP02

Emissions Control Equipment Description: Carter Day Baghouse Model # 376RF6

Applicable Requirements

Emission Unit vented through this Emission Point: MP02

Emission Unit Description: Meal Grinding

Raw Material/Fuel: Meal

Rated Capacity: 150 Tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: <20%

Authority for Requirement: City of Des Moines Construction Permit #0090
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-9

Pollutant: PM

Emission Limit: 0.1 gr/scf

Authority for Requirement: City of Des Moines Construction Permit #0090
567 IAC 23.4(7) Standards for Grain Handling and
Processing Plants.
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-16

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

EP MP02 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity $\geq 20\%$ is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: MP03 – Meal Transfer

Associated Equipment

Associated Emission Unit ID Numbers: MP03

Emissions Control Equipment ID Number: MP03

Emissions Control Equipment Description: Carter Day Baghouse Model #72RJ96

Applicable Requirements

Emission Unit vented through this Emission Point: MP03

Emission Unit Description: Meal Transfer/Storage

Raw Material/Fuel: Meal

Rated Capacity: 137 Tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: <20%

Authority for Requirement: City of Des Moines Construction Permit #0090
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-9

Pollutant: PM

Emission Limit: 0.1 gr/scf

Authority for Requirement: City of Des Moines Construction Permit #0090
567 IAC 23.4(7) Standards for Grain Handling and
Processing Plants.
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-16

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

EP MP03 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity $\geq 20\%$ is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

**Emission Point ID Number: MP04 – Flowability Agent
Receiving/Storage**

Associated Equipment

Associated Emission Unit ID Numbers: Flowability Agent Silo
Emissions Control Equipment ID Number: MP04
Emissions Control Equipment Description: Carter Day Baghouse Model #9BV8

Applicable Requirements

Emission Unit vented through this Emission Point: MP04
Emission Unit Description: Flowability Agent Silo
Raw Material/Fuel: Flowability Agent
Rated Capacity: 25 Tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit: None allowed
Authority for Requirement: Polk County Construction Permit #1637
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-9

Pollutant: PM/ PM₁₀
Emission Limits: 0.1 gr/dscf
0.33 lb/hr
1.45 ton/year
Authority for Requirement: Polk County Construction Permit #1637
567 IAC 23.4(7) Standards for Grain Handling and
Processing Plants.
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-16

Stack/Vent (Emission Point) Specifications

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 60

Stack Opening, (inches, dia.): 9.6

Exhaust Flow Rate (scfm): 380

Exhaust Temperature (8F): Ambient

Discharge Style: Horizontal, unobstructed

Authority for Requirement: Polk County Construction Permit #1637

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

EP MP04 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity >0% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: MP05 – Meal Building and Conveying

Associated Equipment

Associated Emission Unit ID Numbers: MP05

Emissions Control Equipment ID Number: MP05

Emissions Control Equipment Description: Carter Day Baghouse Model # 144RJ84

Applicable Requirements

Emission Unit vented through this Emission Point: MP05

Emission Unit Description: Meal Conveying

Raw Material/Fuel: Meal

Rated Capacity: 220 Tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: <20%

Authority for Requirement: City of Des Moines Construction Permit #0102
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-9

Pollutant: PM

Emission Limit: 0.1 gr/scf

Authority for Requirement: City of Des Moines Construction Permit #0102
567 IAC 23.4(7) Standards for Grain Handling and
Processing Plants.
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-16

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

EP MP05 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity $\geq 20\%$ is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: MP06 – Truck Load-out

Associated Equipment

Associated Emission Unit ID Numbers: MP06

Emissions Control Equipment ID Number: MP06

Emissions Control Equipment Description: Carter Day Baghouse Model #144RJ96

Applicable Requirements

Emission Unit vented through this Emission Point: MP06

Emission Unit Description: Meal/Hull Load-out

Raw Material/Fuel: Meal

Rated Capacity: 230 Tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: <20%

Authority for Requirement: City of Des Moines Construction Permit #0102
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-9

Pollutant: PM

Emission Limit: 0.1 gr/scf

Authority for Requirement: City of Des Moines Construction Permit #0102
567 IAC 23.4(7) Standards for Grain Handling and
Processing Plants.
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-16

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

EP MP06 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity $\geq 20\%$ is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: MP07 – Rail Load-out

Associated Equipment

Associated Emission Unit ID Numbers: MP07

Emissions Control Equipment ID Number: MP07

Emissions Control Equipment Description: Carter Day Baghouse Model #72RJ96

Applicable Requirements

Emission Unit vented through this Emission Point: MP07

Emission Unit Description: Meal Load-out

Raw Material/Fuel: Meal

Rated Capacity: 230 Tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: <20%

Authority for Requirement: City of Des Moines Construction Permit #0105
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-9

Pollutant: PM

Emission Limit: 0.1 gr/scf

Authority for Requirement: City of Des Moines Construction Permit #0105
567 IAC 23.4(7) Standards for Grain Handling and
Processing Plants.
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-16

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

EP MP07 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity $\geq 20\%$ is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: MP08 - Meal Storage Tank Vents

Applicable Requirements

Emission Unit vented through this Emission Point: MP08 Meal storage

Emission Unit Description: Meal storage tanks

Raw Material/Fuel: Soybean meal

Rated Capacity: 137 tons/hour

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: <20%

Authority for Requirement: Polk County Board of Health Rules and Regulations
Chapter V, Section 5-9
City of Des Moines Construction Permit #0090

Pollutant: PM

Emission Limit: 0.1gr/dscf

Authority for Requirement: 567 IAC 23.4(7) Standards for Grain Handling and
Processing Plants.
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-16
City of Des Moines Construction Permit #0090

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

EPMP08 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity >20% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: MP09 - Meal Blend Tanks Vents

Applicable Requirements

Emission Unit vented through this Emission Point: MP09 Meal Blend Tanks

Emission Unit Description: Meal Storage

Raw Material/Fuel: Soybean Meal

Rated Capacity: 200 Tons/hour

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: <20%

Authority for Requirement: Polk County Board of Health Rules and Regulations
Chapter V, Section 5-9
City of Des Moines Construction Permit #0102

Pollutant: PM

Emission Limit: 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.4(7) Standards for Grain Handling and
Processing Plants.
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-16
City of Des Moines Construction Permit #0102

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

EPMP09 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity >20% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: R01 – Filter Aid Receiving/Storage

Associated Equipment

Associated Emission Unit ID Number : R01

Emissions Control Equipment ID Number: R01

Emissions Control Equipment Description: Flex-Kleen Baghouse Model #84-BV9

Applicable Requirements

Emission Unit vented through this Emission Point: R01

Emission Unit Description: Filter aid Receiving/Storage

Raw Material/Fuel: Filter Aid

Rated Capacity: 6 Tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: <20%

Authority for Requirement: Polk County Construction Permit #0366
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-9

Pollutant: PM

Emission Limit: 0.1 gr/scf

Authority for Requirement: Polk County Construction Permit #0366
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-14

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

EP R01 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity $\geq 20\%$ is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: R02 – Bleaching Clay Receiving/Storage

Associated Equipment

Associated Emission Unit ID Numbers: R02

Emissions Control Equipment ID Number: R02

Emissions Control Equipment Description: Flex-kleen Baghouse Model #84BV9

Applicable Requirements

Emission Unit vented through this Emission Point: R02

Emission Unit Description: Bleaching Clay Receiving/Storage

Raw Material/Fuel: Bleaching Clay

Rated Capacity: 7.5 Tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: <20%

Authority for Requirement: Polk County Construction Permit #0367
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-9

Pollutant: PM

Emission Limit: 0.1 gr/scf

Authority for Requirement: Polk County Construction Permit #0367
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-14

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

EP R02 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity $\geq 20\%$ is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: R03 – Slurry/Precoat Tanks

Associated Equipment

Associated Emission Unit ID Number: R03

Emissions Control Equipment ID Number: R03

Emissions Control Equipment Description: Ducon Scrubber Model #3

Applicable Requirements

Emission Unit vented through this Emission Point: R03

Emission Unit Description: Slurry/Precoat Tanks

Raw Material/Fuel: Filter Aid/Bleaching Clay/Vegetable Oil

Rated Capacity: 1.6 Ton/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: <20%

Authority for Requirement: Polk County Construction Permit #0414
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-9

Pollutant: PM

Emission Limit: 0.1 gr/scf

Authority for Requirement: Polk County Construction Permit #0414
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-14

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

EP R03 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity $\geq 20\%$ is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: R04 – Filteraid/Bleaching Clay Daybins

Associated Equipment

Associated Emission Unit ID Number: R04

Emissions Control Equipment ID Number: R04a, R04b

Emissions Control Equipment Description: 2-Torrit Day Bag-filters Model #84-OB

Applicable Requirements

Emission Unit vented through this Emission Point: R04

Emission Unit Description: Day Bins

Raw Material/Fuel: Filteraid/Bleaching Clay

Rated Capacity: 1.6 ton/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: <20%

Authority for Requirement: Polk County Construction Permits #0368 and #0369
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-9

Pollutant: PM

Emission Limit: 0.1 gr/scf

Authority for Requirement: Polk County Construction Permits #0368 and #0369
Polk County Board of Health Rules and Regulations
Chapter V, Section 5-14

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

EP R04 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity $\geq 20\%$ is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: R05 – Hydrogen Generator

Applicable Requirements

Emission Unit vented through this Emission Point: R05

Emission Unit Description: Hydrogen Generator

Raw Material/Fuel: Natural Gas/ VentGas

Rated Capacity: 0.013 mmscf/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: <20%

Authority for Requirement: Polk County Board of Health Rules and Regulations
Chapter V, Section 5-9

Pollutant: PM

Emission Limit: 0.6 lb/MMBTU

Authority for Requirement: 567 IAC 23.3 (2) “b”

Pollutant: SO₂

Emission Limit: 500 ppmv

Authority for Requirement: 567 IAC 23.3 (3) “e”

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3) “b”

Emission Point ID Number: C01 – Coal Receiving/Conveying

Associated Equipment

Associated Emission Unit ID Number: C01
Emissions Control Equipment ID Number: C01
Emissions Control Equipment Description: MAC Baghouse Model 144MCF494-431

Applicable Requirements

Emission Unit vented through this Emission Point: C01
Emission Unit Description: Coal Receiving/ Conveying
Raw Material/Fuel: Coal
Rated Capacity: 28.4 Tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limits: 0% from control device
<5% from each of the pickup points

Authority for Requirement: State of Iowa Construction Permit Number 87-A-014

Pollutant: PM

Emission Limit: 0.01gr/scf

Authority for Requirement: State of Iowa Construction Permit Number 87-A-014

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Hours of operation: Shall not exceed 3,285 hours per year of fan operation

Reporting & Record keeping: Record hours of operation and report annually to the Iowa Department of Natural Resources by January 31 of the following year.

Authority for Requirement: State of Iowa Construction Permit Number 87-A-014

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

EP C01 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity >5% is observed from any of the pickup points or >0% from the control device, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: C02 – Coal Storage

Associated Equipment

Associated Emission Unit ID Numbers: C02
Emissions Control Equipment ID Number: C02
Emissions Control Equipment Description: Carter Day Baghouse Model 72RJ37

Applicable Requirements

Emission Unit vented through this Emission Point: C02
Emission Unit Description: Coal Storage
Raw Material/Fuel: Coal
Rated Capacity: 28.4 Tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit: 0%
Authority for Requirement: Iowa Department of Natural Resources Construction Permit
Number 94-A-378

Pollutant: PM/ PM₁₀
Emission Limits: 0.0072 gr/dscf
0.154 lb/hr
0.68 Ton/yr
Authority for Requirement: Iowa Department of Natural Resources Construction Permit
Number 94-A-378

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 99.8 ft
Stack Area: 1.58 sq ft
Stack Exhaust Flow Rate: 2500 scfm
Vertical, Unobstructed Discharge Required: Yes ☐ No ☒
Authority for Requirement: Iowa Department of Natural Resources Construction Permit
Number 94-A-378

* Per ADM's 8/25/04 letter regarding the Des Moines plant's draft Title V permit, below are the correct stack parameters:

Stack Height, (feet): 104

The permittee shall submit an application to modify the construction permit listed above no later than 60 days from issuance of this Title V permit.

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

EP C02 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity >0% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: C03 – Coal Feeders

Associated Equipment

Associated Emission Unit ID Number: C03
Emissions Control Equipment ID Number: C03
Emissions Control Equipment Description: MAC Equipment Baghouse Model
Number 54AVS16

Applicable Requirements

Emission Unit vented through this Emission Point: C03
Emission Unit Description: Coal Feeders
Raw Material/Fuel: Coal
Rated Capacity: 10.7 Tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit: <20%
Authority for Requirement: Polk County Board of Health Rules and Regulations
Chapter V, Section 5-9

Pollutant: PM₁₀
Emission Limits: 0.01 gr/scf
0.023 lb/hr
0.10 tons/yr
Authority for Requirement: Iowa Department of Natural Resources Construction Permit
Number 95-A-027

Pollutant: PM
Emission Limit: 0.1 gr/scf
Authority for Requirement: 567IAC – 23.3(2)“a”
Iowa Department of Natural Resources Construction Permit
Number 95-A-027

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 100 ft

Stack Area: 0.349 sq ft

Stack Exhaust Flow Rate: 272 scfm

Stack Temperature (°F): 110

Vertical, Unobstructed Discharge Required: Yes ☐ No ☒

Authority for Requirement: Iowa Department of Natural Resources Construction Permit
Number 95-A-027

* Per ADM's 8/25/04 letter regarding the Des Moines plant's draft Title V permit, below are the correct stack parameters:

Stack Height, (feet): 84

Stack Area: 0.267 sq ft

Stack exhaust flow rate (scfm): 300

Vertical Discharge Required: No

The permittee shall submit an application to modify the construction permit listed above no later than 60 days from issuance of this Title V permit.

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Stack Testing:

Pollutant - PM

Stack Test to be completed by – No later than December 14, 2006

Test Method - Iowa Compliance Sampling Manual Method 5

Authority for Requirement - 567 IAC 22.108(3)

Pollutant - PM-10

Stack Test to be completed by - No later than December 14, 2006

Test Method - 40 CFR 51, Appendix M, Method 201A with 202 *

Authority for Requirement - 567 IAC 22.108(3)

* or approved alternative

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

EP C03 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity $\geq 20\%$ is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: C04 – Limestone Receiving/Daybin

Associated Equipment

Associated Emission Unit ID Number: C04
Emissions Control Equipment ID Number: C04
Emissions Control Equipment Description: MAC Baghouse Model 72AVS16

Applicable Requirements

Emission Unit vented through this Emission Point: C04
Emission Unit Description: Limestone Receiving/Daybin
Raw Material/Fuel: Limestone
Rated Capacity: 1.99 Tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit: 0%
Authority for Requirement: Iowa Department of Natural Resources Construction Permit
Number 94-A-379

Pollutant: PM/ PM₁₀
Emission Limits: 0.01 gr/scf
0.0514 lb/hr
0.23 Ton/yr
Authority for Requirement: Iowa Department of Natural Resources Construction Permit
Number 94-A-379

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 58 ft
Stack Area: 0.46 sq ft
Stack Exhaust Flow Rate: 600 scfm
Stack Temperature (°F): 106
Vertical, Unobstructed Discharge Required: Yes ☐ No ☒
Authority for Requirement: Iowa Department of Natural Resources Construction Permit
#94-A-379

* Per ADM's 10/22/04 letter regarding the Des Moines plant's draft Title V permit, below are the correct stack parameters:

Stack Temperature (degrees F): 68

The permittee shall submit an application to modify the construction permit listed above no later than 60 days from issuance of this Title V permit.

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

EP C04 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity >0% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: C05 – Main Boiler, Startup/ Preheat

Associated Equipment

Associated Emission Unit ID Numbers: C05, C05a

Emissions Control Equipment ID Number: C05

Emissions Control Equipment Description: Aero-Pulse Baghouse Model

Number RF-1296-(1224)-14-FS-Y-WP

Continuous Emissions Monitors ID Numbers: ME-01 – CO, NO_x, SO₂ and Opacity.

Applicable Requirements

EP	EU	Emission Unit Description	Raw Material	Rated Capacity
C05	C05	Main boiler	Coal	192 MMBTU/hr
C05	C05a	Startup/Preheat	Natural gas	0.107 MMSCF/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 15%

Authority for Requirement: Iowa Department of Natural Resources Construction Permit
Number 87-A-013P-S1
567IAC 23.3(2)"d"

Pollutant: PM

Emission Limit: 0.04 lb/MM BTU of heat input

Authority for Requirement: Iowa Department of Natural Resources Construction Permit
Number 87-A-013P-S1
40 CFR60 Subpart Db
567 IAC 23.1(2)"ccc"

Pollutant: SO₂

Emission Limits: For a 30 day rolling average:
0.85 lb/MM BTU of heat input
And 90% reduction of the equivalent inlet SO₂ rate (For coal blends with equivalent inlet SO₂ rate greater than 2.0 lb/MM BTU)
or 0.20 lb/MM BTU of heat input (For coal blends which have an equivalent inlet SO₂ rate less than or equal to 2.0 lb/MMBTU).

For a 24 hour averaging period:
0.93 lb/MM BTU of heat input

Authority for Requirement: 40 CFR 52
40CFR60 Subpart A and Subpart Db NSPS
USEPA PSD Permit as amended March 7, 1990 and subsequent dates.
Iowa Department of Natural Resources Construction Permit Number 87-A-013P-S1
567 IAC 23.1(2)"ccc"

Pollutant: NO_x

Emission Limit: 0.50 lb/MM BTU of heat input (30 day rolling average)

Authority for Requirement: 40 CFR 52
40CFR60 Subpart A and Subpart Db
USEPA PSD Permit as amended March 7, 1990 and subsequent dates.
Iowa Department of Natural Resources Construction Permit Number 87-A-013P-S1
567 IAC 23.1(2)"ccc"

Pollutant: CO

Emission Limits: 0.14 lb/MM BTU of heat input
26.9 lb/hr
117.7 ton/yr

Authority for Requirement: Iowa Department of Natural Resources Construction Permit Number 87-A-013P-S1

Pollutant: Beryllium

Emission Limits: 0.00027 lb/hr (3 hour averaging period)
0.0000014 lb/MM BTU of heat input (3 hour averaging period)

Authority for Requirement: 40 CFR 52
USEPA PSD Permit as amended March 7, 1990 and subsequent dates.
Iowa Department of Natural Resources Construction Permit Number 87-A-013P-S1

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits:

- A. The multi-bed fluidized combustion (MBC) boiler is limited to a maximum heat input rating of 192.0 million BTUs per hour (MMBTU/hr).
 - B. The approved boilers are restricted to coal, with gas or oil startup. "Coal" means any subbituminous coal supply, any bituminous coal supply, or blends composed of such coal supplies.
 - C. If a turbine/generator is to be installed as part of the project, the turbine shall be a conventional, unfired, steam turbine.
-

Operating Condition Monitoring:

- A. Quarterly written excess emission (opacity) reports shall be submitted to the state per 40 CFR 60.7(c) and 40 CFR 60.49b(h). The quarterly report is based on the continuous emission monitoring records and is required even if the excess emissions were "zero."
- B. Quarterly written excess carbon monoxide emission reports shall be submitted and postmarked not more than thirty (30) days following the last monitoring day of the reported quarter. The quarterly report is based on the continuous emission monitoring records and is required even if the excess emissions were "zero."
- C. Hourly emission rate data shall be recorded and used by the owner or operator to calculate compliance with the applicable emission rates and percent reductions for the specified averaging times. After completion of the initial performance tests, compliance with the SO₂ and NO_x emission rate limitation and the SO₂ percent reduction requirements shall be calculated as the average of all valid hourly emission rate data and valid hourly SO₂ percent reduction data for the 30 previous boiler operating days during which each standard applies. The owner shall calculate a new 30-day average at the end of each boiler operating day. Compliance with the SO₂ standards shall be determined separately depending on the average inlet SO₂ rate to the boiler. SO₂ emission rate and percent reduction data collected under the two inlet SO₂ rate ranges shall not be intermixed except when determining compliance with the short term standards (i.e., 24-hour standard).
- D. The weight percent sulfur and gross heating value, as obtained through daily fuel sampling and analysis (FSA) of coal contained in the day bunker shall be used to calculate an equivalent inlet SO₂ rate using the following equation.

$$\text{Equivalent Inlet SO}_2 \text{ Rate} = (\%S/\text{GHV}) * K$$

%S = Weight percent sulfur of coal contained in bunker

GHV = Gross heating value of coal contained in bunker

K = 20,000 (lb*BTUs)/(%*MMBTUs)

The facility shall use the equivalent SO₂ rate to calculate each hourly percent reduction during the boiler operating day.

- E. In order to determine continuous compliance with the Beryllium (Be) standard, an “as-fired” coal sample shall be taken semi-annually or whenever a new coal supply is burned in the boiler (whichever is more frequent), and shall be analyzed for Be content. The owner shall accomplish said sampling within one (1) week of the semi-annual deadline or change of coal supply. The results of the analysis shall be submitted to the PSD implementing agency within two (2) weeks of the date of collection of the sample. The sampling and analysis procedures after the initial verification of compliance shall be the same as performed on the sample collected during the initial Be-related stack testing of the unit. A “new coal supply” shall be defined as coal obtained from a different mine or supplier.
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Continuous Emission Monitoring:

In accordance with NSPS Subpart Db and 40 CFR 60.13, the facility shall install, calibrate, maintain, and operate a continuous opacity monitoring system (COMS) for measuring the opacity of the emissions discharged to the atmosphere and record the output of the system. The system shall be designed to meet the 40 CFR 60, Appendix B, Performance Specification 1 (PS1).

Compliance with the carbon monoxide emission limits of this permit shall be continuously demonstrated by the owner through the use of a continuous emission monitoring system (CEMS). Therefore, the facility shall install, calibrate, maintain, and operate a CEMS for measuring carbon monoxide emissions discharged to the atmosphere and record the output of the system. The system shall be designed to meet the 40 CFR 60, Appendix B, Performance Specification 4 (PS4).

Compliance with the sulfur dioxide (SO₂), nitrogen oxides (NO_x), and SO₂ percent reduction requirements of this permit shall be continuously demonstrated by the owner through the use of a CEMS. Therefore, the facility shall install, calibrate, maintain, audit, and operate a CEMS for measuring SO₂, NO_x, and the appropriate diluent gas (oxygen or carbon dioxide) emissions discharged to the atmosphere and record the output of the system. The system shall be designed to meet the 40 CFR 60.13 requirements, the 40 CFR 60, Appendix B, Performance Specifications 2 and 3 (PS2 and PS3), and the 40 CFR Part 60 Appendix F requirements.

The CEMS shall be operated and data recorded during any period any fuel is combusted in the boiler. Hourly parts-per-million data recorded by the pollutant CEMS shall be converted to lb-pollutant per million BTUs (lb/MMBTUs) heat input using the equations and methodology specified in 40 CFR 60, Appendix A, Method 19.

The owner shall successfully complete SO₂ and NO_x CEMs performance evaluations (including relative accuracy and calibration drift assessment) under the following two conditions: (1) firing a coal or blend of coals that results, or can reasonably be expected to result, in controlled emissions between 0.0 and 0.6 lb-SO₂/MMBTUs; and (2) firing a coal or blend of coals that results, or can reasonably be expected to result, in controlled emissions 0.60 or greater lb-SO₂/MMBTUs.

Successful performance tests in at least one of the above-specified emission ranges shall be completed prior to beginning the initial compliance demonstration required under Condition 12 of IDNR Construction Permit 87-A-013PS1. The remaining performance evaluation may be run during any of the quarterly Appendix F audits, or at any other time, but must be completed no later than 90 days after any fuel switch which results, or can reasonably be expected to result, in controlled SO₂ emissions in the range for which a successful performance evaluation has not previously been completed.

Fuel Sampling and Analysis:

The owner shall install, operate and maintain a fuel sampling and analysis (FSA) system to collect “as-fired” fuel data. The FSA system shall meet or exceed the design and performance specifications set forth in 40 CFR 60, Appendix A, Method 19 (incorporating by reference of ASTM method D2234-76, et al.). As specified by Method 19, at least a minimum number and weight of sample increments shall be collected at a location immediately preceding the day bunker (downstream of all blending operations), composited, and analyzed daily. Coal analyses shall be conducted for weight percent sulfur (%S) and gross heat value (GHV, expressed in BTUs/lb-coal).

The owner may develop an in-house coal analysis program or may send collected samples to a laboratory for analysis. In either case, the analytical results shall be available to the MBC boiler operator within 72 hours of the sample collection time. To ensure that coal analyses are performed in accordance with ASTM methods, the permit-issuing agency will require the owner to conduct periodic analyses of quality assurance audit coal samples provided by EPA.

The “as-fired” fuel data will be used to determine the equivalent hourly average SO₂ inlet rate to the boiler, and will be used in conjunction with the SO₂ CEMS emission rate data to determine compliance with the SO₂ 30-day rolling percent reduction limit. The “equivalent hourly average SO₂ inlet rate” means the sulfur input rate expressed in terms of “lbs SO₂ /MMBTUs heat input” based on the assumption of 100 percent conversion of sulfur to SO₂.

Authority for Requirement: Iowa Department of Natural Resources Construction Permit Number 87-A-013P-S1

This unit is an affected source under 40 CFR 63 Subpart DDDDD – NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters. Per the definitions listed in Sec. 63.7575, this unit falls into the existing "large solid fuel subcategory." The permittee shall comply with this subpart no later than September 13, 2007. The permittee shall also meet the notification requirements in Sec. 63.7545 according to the schedule in Sec. 63.7545 and in Subpart A of 40 CFR Part 63. (Note: Some of the notifications must be submitted before compliance with the emission limits and work practice standards are required.)

Authority for Requirement: 40 CFR Part 63 Subpart DDDDD

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 255

Stack Diameter (inches): 61.5

Stack Exhaust Flow Rate (scfm): 67,560

Stack Temperature (°F): 383

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa Department of Natural Resources Construction Permit
Number 87-A-013P-S1

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Periodic Monitoring requirements for Opacity, SO₂, NO_x and CO shall be met by complying with the requirements of Continuing Emission Monitoring (CEM) listed above.

Periodic Monitoring requirements for Beryllium(BE) is met by coal sampling as required under Operating Condition Monitoring E.

Stack testing:

Pollutant - PM

1st Stack Test to be completed by - No later than December 14, 2005

2nd Stack Test to be completed by – Between June 14, 2007 and no later than
June 14, 2008

Test Method - 40 CFR 60, Appendix A, EPA Method 5

Authority for Requirement - 567 IAC 22.108(3)

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐
The Agency O & M will be for the baghouse.

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Operation and Maintenance Plan
CE C05 (Coal Boiler Baghouse):

ADM Cogen facility performs the following operation and maintenance checks on a regular schedule. A record of the findings and corrective actions taken shall be kept on an operation log or a maintenance log.

The pressure drop (inches of water) across the baghouse will be recorded on a daily basis. The normal operating range is one to ten inches of water. If the pressure drop falls outside of the normal operating range, corrective action will be taken.

Inlet and outlet gas temperatures (°F) are monitored on a daily basis.

Gas flow rate (scfs) into baghouse will be monitored on a daily basis.

Baghouse hopper conveying system is monitored for proper operation on a daily basis.

Pulse Jet (compressed air) cleaning system shall be monitored for proper operation on a daily basis.

The Opacity of the stack exhaust is monitored and recorded on daily basis using a COMs and Data Acquisition System.

Baghouse Preventative Maintenance - Baghouse is dye tested and repairs made on outages to maintain optimum efficiency and remain within permit limits. Should opacity approach permit limits, boiler is taken offline for repairs.

Routine Maintenance - Bags are inspected for integrity at least one per year with documentation of bag replacement to include date, type of bag, and location of bag. Routine observations (visual and audible) are conducted daily to check for indications of abnormal conditions which may require corrective action.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: C06a and C06b – Fly Ash Conveying, loadout

Associated Equipment

Associated Emission Unit ID Numbers: C06, C08

Emissions Control Equipment ID Number: C06

Emissions Control Equipment Description: Flex-Kleen Baghouse

Applicable Requirements

EP	EU	Emission Unit Description	Raw Material	Rated Capacity
C06a, C06b	C06, C08	Fly-ash conveying, Fly-ash loadout	Fly -ash	2.52 tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from each emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 0% Opacity

Authority for Requirement: Iowa Department of Natural Resources Construction Permits
Number 87-A-021 and Number 87-A-022

Pollutant: PM

Emission Limit: 0.02gr/dscf

Authority for Requirement: Iowa Department of Natural Resources Construction Permits
Number 87-A-021 and Number 87-A-022

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Transportation of limestone to day-bins shall be formed by equipment that is “dust-tight”. Fugitive emissions were not calculated - therefore, the opacity at all points along the conveyors, etc., must be zero percent.

Authority for Requirement: Iowa Department of Natural Resources Construction Permits
Number 87-A-021 and Number 87-A-022

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

EP C06a and C06b shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity >0% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: C07 – Fly-ash Silo

Associated Equipment

Associated Emission Unit ID Number: C07

Emissions Control Equipment ID Number: C07

Control Equipment Description: Flex-kleen Baghouse Model 58-BVB-C9-IIG

Applicable Requirements

Emission Unit vented through this Emission Point: C07

Emission Unit Description: Fly-ash Storage

Raw Material/Fuel: Fly-ash

Rated Capacity: 2.52 tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 0%

Authority for Requirement: Iowa Department of Natural Resources Construction
Permit Number 87-A-022-S90

Pollutant: PM

Emission Limit: 0.08 lb/hr

Authority for Requirement: Iowa Department of Natural Resources Construction
Permit Number 87-A-022-S90

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

EP C07 shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity >0% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

**Emission Point ID Number: C09 - Primary Standby Boiler
C09a - Primary Standby Boiler (Bypass)**

Associated Equipment

Associated Emission Unit ID Numbers: C09, C09a, C09b

Applicable Requirements

EP	EU	Emission Unit Description	Raw Material	Rated Capacity
C09, C09a	C09	Primary standby boiler	#6 fuel oil combustion	1.167 mgal/hr
C09, C09a	C09a	Primary standby boiler	#2 fuel oil combustion	1.241 mgal/hr
C09, C09a	C09b	Primary standby boiler	natural gas combustion	0.175 mmscf/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: <20%

Authority for Requirement: State of Iowa Construction Permit # 88-A-203
State of Iowa Construction Permit Supplement #88-A-203-S
567 IAC 23.3(2) d
Polk Board of Health Rules and Regulations
Chapter V, Section 5-9

Pollutant: PM

Emission Limits: 0.6 lb/MMBTU
47.6 Ton/yr

Authority for Requirement: State of Iowa Construction Permit Supplement
Number 88-A-203-S
567 IAC 23.3(2) "b"

Pollutant: SO₂

Emission Limits: 2.5 lb/MMBTU (when burning fuel oil)
500 ppmv while burning natural gas
349.1 Ton/yr

Authority for Requirement: State of Iowa Construction Permit Supplement
Number 88-A-203-S
567 IAC 23.3(3) b
567 IAC 23.3(3) "e"

Pollutant: NO_x

Emission Limit: 215.7 Ton/yr

Authority for Requirement: State of Iowa Construction Permit Supplement
Number 88-A-203-S

Pollutant: CO

Emission Limit: 19.5 Ton/yr

Authority for Requirement: State of Iowa Construction Permit Supplement
Number 88-A-203-S

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Reporting & Record keeping:

The following records shall be maintained on-site for five (5) years and be available for inspection upon request by representatives of the Department of Natural Resources:

Process throughput: No person shall allow, cause or permit the combustion of number 1 or number 2 fuel oil exceeding a sulfur content of 0.5 percent by weight. For #6 fuel sulfur shall not exceed 2.3 % by weight.

The facility shall monitor the percent of sulfur by weight in the fuel oil as delivered. The documentation may be vendor supplied or facility generated.

Authority for Requirement: 567 IAC 23.3(3)"b"(1)

All Natural gas and #6 fuel oil which go the three standby boilers must be continuously metered and logged on a daily basis. Records of natural gas and fuel oil consumed shall be kept for a rolling period of five (5) years, and be made available upon request to the IDNR or its appointed representative.

Authority for Requirement: State of Iowa Construction Permit Supplement
Number 88-A-203-S

This unit is an affected source under 40 CFR 63 Subpart DDDDD – NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters. According to Sec. 63.7506(b), existing large gaseous fuel and existing large liquid fuel units are only subject to the initial notification requirements in Sec. 63.9(b). As specified in Sec. 63.7545(b), an initial notification must be submitted not later than 120 days after November 12, 2004. The initial notification must include the information listed in Sec. 63.7545(b)(1) and (b)(2), as applicable.

Authority for Requirement: 40 CFR 63 Subpart DDDDD

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

EP C09 & C09a shall be visually checked for observable emissions once every week by a designated observer. The observation shall be taken while the equipment is burning #2 or #6 fuel oil and operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity >20% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: C012 – Emergency Generator #2

Applicable Requirements

Emission Unit vented through this Emission Point: C012

Emission Unit Description: Emergency Generator

Raw Material/Fuel: #2 Fuel Oil

Rated Capacity: 44.5 gal/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: <20 %

Authority for Requirement: Polk County Construction Permit #1115

Pollutant: PM₁₀

Emission Limits: 0.6 lb/MMBTU

0.36 Ton/yr

Authority for Requirement: Polk County Construction Permit #1115

567 IAC 23.3 (2) “b”

Pollutant: SO₂

Emission Limits: 2.5 lb/MMBTU

0.81 Ton/yr

Authority for Requirement: Polk County Construction Permit #1115

567 IAC 23.3 (3) “b”

Pollutant: NO_x

Emission Limit: 5.22 Ton/yr

Authority for Requirement: Polk County Construction Permit #1115

Pollutant: VOC

Emission Limit: 0.36 Ton/yr

Authority for Requirement: Polk County Construction Permit #1115

Pollutant: CO

Emission Limit: 1.13 Ton/yr

Authority for Requirement: Polk County Construction Permit #1115

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Hours of operation: Shall not operate more than 500 Hours/12 month period rolled monthly.

Work practice standards: Sulfur content of fuel shall not exceed 0.5% Sulfur

Reporting & Record keeping: Fuel supplier sulfur certification shall be obtained and made available. Monthly hour meter readings shall be logged and maintained on site. Hours log and fuel supplier certification shall be made available to the department upon request.

Authority for Requirement: Polk County Construction Permit #1115

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

EP C012 shall be visually checked for observable emissions once every month by a designated observer. The observation shall be taken while the equipment is operating at or near full capacity. The observation shall be noted in a log book, which shall state the date, time, observer's signature, and whether any emissions were observed. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity >20% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits. The log book will be maintained on site for 5 years and be made available to representatives of Polk County AQD upon request.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

IV. General Conditions

This permit is issued under the authority of the Iowa Code subsection 455B.133(8) and in accordance with 567 Iowa Administrative Code chapter 22 and Polk County Board Of Health Rules And Regulations, Chapter V, Air Pollution, (Chapter V), Article X, 5-35.

G1. Duty to Comply

1. The permittee must comply with all conditions of the Title V permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for a permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. *567 IAC 22.108(9)"a"*
2. Any compliance schedule shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based. *567 IAC 22.105(2)"h"(3).*
3. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be enforceable by the administrator and must be incorporated into this permit. *567 IAC 22.108 (1)"b"*
4. Unless specified as either "state enforceable only" or "local program enforceable only", all terms and conditions in the permit, including provisions to limit a source's potential to emit, are enforceable by the administrator and citizens under the Act. *567 IAC 22.108 (14)*
5. It shall not be a defense for a permittee, in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. *567 IAC 22.108 (9)"b"*

G2. Permit Expiration

1. Except as provided in 567 IAC 22.104, the expiration of this permit terminates the permittee's right to operate unless a timely and complete application has been submitted for renewal. Any testing required for renewal shall be completed before the application is submitted. *567 IAC 22.116(2)*
2. To be considered timely, the owner, operator, or designated representative (where applicable) of each source required to obtain a Title V permit shall present or mail the Air Quality Bureau, Iowa Department of Natural Resources, Air Quality Bureau, 7900 Hickman Rd, Suite #1, Urbandale, Iowa 50322, four or more copies of a complete permit application, at least 6 months but not more than 18 months prior to the date of permit expiration. The definition of a complete application is as indicated in 567 IAC 22.105(2). *567 IAC 22.105*

G3. Certification Requirement for Title V Related Documents

Any application, report, compliance certification or other document submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. All certifications shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. *567 IAC 22.107 (4)"e"*

G4. Annual Compliance Certification

By March 31 of each year, the permittee shall submit compliance certifications for the previous calendar year. The certifications shall include descriptions of means to monitor the compliance status of all emissions sources including emissions limitations, standards, and work practices in accordance with applicable requirements. The certification for a source shall include the identification of each term or condition of the permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with all applicable department rules. For sources determined not to be in compliance at the time of compliance certification, a compliance schedule shall be submitted which provides for periodic progress reports, dates for achieving activities, milestones, and an explanation of why any dates were missed and preventive or corrective measures. The compliance certification shall be submitted to the administrator, director, and Polk County Air Quality Division. *567 IAC 22.108 (15)"e"*

G5. Semi-Annual Monitoring Report

By March 31 and September 30 of each year, the permittee shall submit a report of any monitoring required under this permit for the 6 month periods of July 1 to December 31 and January 1 to June 30, respectively. All instances of deviations from permit requirements must be clearly identified in these reports, and the report must be signed by a responsible official, consistent with 567 IAC 22.107(4). The semi-annual monitoring report shall be submitted to the director and Polk County Air Quality Division. *567 IAC 22.108 (5).*

G6. Annual Fee

1. The permittee is required under subrule 567 IAC 22.106 to pay an annual fee based on the total tons of actual emissions of each regulated air pollutant. Beginning July 1, 1996, Title V operating permit fees will be paid on July 1 of each year. The fee shall be based on emissions for the previous calendar year.
2. The fee amount shall be calculated based on the first 4,000 tons of each regulated air pollutant emitted each year. The fee to be charged per ton of pollutant will be available from the Department by June 1 of each year. The Responsible Official will be advised of any change in the annual fee per ton of pollutant.
3. The following forms shall be submitted annually by March 31 documenting actual emissions for the previous calendar year.
 - a. Form 1.0 "Facility Identification";
 - b. Form 4.0 "Emissions unit-actual operations and emissions" for each emission unit;
 - c. Form 5.0 "Title V annual emissions summary/fee"; and
 - d. Part 3 "Application certification."
4. The fee shall be submitted annually by July 1. The fee shall be submitted with the following forms:
 - a. Form 1.0 "Facility Identification";
 - b. Form 5.0 "Title V annual emissions summary/fee";
 - c. Part 3 "Application certification."

5. If there are any changes to the emission calculation form, the department shall make revised forms available to the public by January 1. If revised forms are not available by January 1, forms from the previous year may be used and the year of emissions documented changed. The department shall calculate the total statewide Title V emissions for the prior calendar year and make this information available to the public no later than April 30 of each year.
6. Phase I acid rain affected units under section 404 of the Act shall not be required to pay a fee for emissions which occur during the years 1993 through 1999 inclusive.
7. The fee for a portable emissions unit or stationary source which operates both in Iowa and out of state shall be calculated only for emissions from the source while operating in Iowa.
8. Failure to pay the appropriate Title V fee represents cause for revocation of the Title V permit as indicated in 567 IAC 22.115(1)"d".

G7. Inspection of Premises, Records, Equipment, Methods and Discharges

Upon presentation of proper credentials and any other documents as may be required by law, the permittee shall allow the director or the director's authorized representative to:

1. Enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
3. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
4. Sample or monitor, at reasonable times, substances or parameters for the purpose of ensuring compliance with the permit or other applicable requirements. 567 IAC 22.108 (15)"b" and Chapter V, Article II, 5-3 and 5-4

G8. Duty to Provide Information

The permittee shall furnish to the director, within a reasonable time, any information that the director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the director copies of records required to be kept by the permit, or for information claimed to be confidential, the permittee shall furnish such records directly to the administrator of EPA along with a claim of confidentiality. 567 IAC 22.108 (9)"e" and Chapter V, Article X, 5-46 and 5-47

G9. General Maintenance and Repair Duties

The owner or operator of any air emission source or control equipment shall:

1. Maintain and operate the equipment or control equipment at all times in a manner consistent with good practice for minimizing emissions.
2. Remedy any cause of excess emissions in an expeditious manner.
3. Minimize the amount and duration of any excess emission to the maximum extent possible during periods of such emissions. These measures may include but not be limited to the use of clean fuels, production cutbacks, or the use of alternate process units or, in the case of utilities, purchase of electrical power until repairs are completed.
4. Schedule, at a minimum, routine maintenance of equipment or control equipment during periods of process shutdowns to the maximum extent possible. *567 IAC 24.2(1) and Chapter V, Article VI, Section 5-17.1*

G10. Recordkeeping Requirements for Compliance Monitoring

1. In addition to any source specific recordkeeping requirements contained in this permit, the permittee shall maintain the following compliance monitoring records, where applicable:
 - a. The date, place and time of sampling or measurements
 - b. The date the analyses were performed.
 - c. The company or entity that performed the analyses.
 - d. The analytical techniques or methods used.
 - e. The results of such analyses; and
 - f. The operating conditions as existing at the time of sampling or measurement.
 - g. The records of quality assurance for continuous compliance monitoring systems (including but not limited to quality control activities, audits and calibration drifts.)
2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.
3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:
 - a. Comply with all terms and conditions of this permit specific to each alternative scenario.
 - b. Maintain a log at the permitted facility of the scenario under which it is operating.
 - c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. *567 IAC 22.108(4), 567 IAC 22.108(12)*

G11. Evidence used in establishing that a violation has or is occurring.

Notwithstanding any other provisions of these rules, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions herein.

1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred

at a source:

- a. A monitoring method approved for the source and incorporated in an operating permit pursuant to 567 Chapter 22;
 - b. Compliance test methods specified in 567 Chapter 25; or
 - c. Testing or monitoring methods approved for the source in a construction permit issued pursuant to 567 Chapter 22.
2. The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
- a. Any monitoring or testing methods provided in these rules; or
 - b. Other testing, monitoring, or information gathering methods that produce information comparable to that produced by any method in subrule 21.5(1) or this subrule. 567 IAC 21.5(1)-567 IAC 21.5(2)

G12. Prevention of Accidental Release: Risk Management Plan Notification and Compliance Certification

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Act, the permittee shall notify the department of this requirement. The plan shall be filed with all appropriate authorities by the deadline specified by EPA. A certification that this risk management plan is being properly implemented shall be included in the annual compliance certification of this permit. 567 IAC 22.108(6)

G13. Hazardous Release

The permittee must report any situation involving the actual, imminent, or probable release of a hazardous substance into the atmosphere which, because of the quantity strength and toxicity of the substance, creates an immediate or potential danger to the public health, safety or to the environment. A verbal report shall be made to the Department at (515) 281-8694 and to the local police department or the office of the sheriff of the affected county as soon as possible but not later than six hours after the discovery or onset of the condition. This verbal report must be followed up with a written report as indicated in 567 IAC 131.2(2). 567 IAC Chapter 131-State Only

G14. Excess Emissions and Excess Emissions Reporting Requirements

1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to one six-minute period per one-hour period. An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the incident of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following review of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. In the case of an electric utility, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service, unless, the director shall, upon investigation, reasonably determine that continued operation constitutes an unjustifiable environmental hazard and issue an order that such operation is not in the public interest and require a process shutdown to commence immediately.

2. Excess Emissions Reporting

a. Oral Reporting of Excess Emissions. An incident of excess emission (other than an incident of excess emission during a period of startup, shutdown, or cleaning) shall be reported to the appropriate field office of the department within eight hours of, or at the start of the first working day following the onset of the incident. The reporting exemption for an incident of excess emission during startup, shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in 567-subrule 25.1(6). An oral report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 25.1(1)) if the incident of excess emission continues for less than 30 minutes and does not exceed the applicable visible emission standard by more than 10 percent opacity. The oral report may be made in person or by telephone and shall include as a minimum the following:

- i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.
- iii. The time and expected duration of the excess emission.
- iv. The cause of the excess emission.
- v. The steps being taken to remedy the excess emission.
- vi. The steps being taken to limit the excess emission in the interim period.

b. Written Reporting of Excess Emissions. A written report of an incident of excess emission shall be submitted as a follow-up to all required oral reports to the department within seven days of the onset of the upset condition, and shall include as a minimum the following:

- i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.
- iii. The time and duration of the excess emission.
- iv. The cause of the excess emission.
- v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.
- vi. The steps that were taken to limit the excess emission.

vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. 567 IAC 24.1(1)-567 IAC 24.1(4) and Chapter V, Article VI, 5-17

3. Emergency Defense for Excess Emissions. For the purposes of this permit, an “emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include non-compliance, to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation or operator error. An emergency constitutes an affirmative defense to an action brought for non-compliance with technology based limitations if it can be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that:

- a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;

- b. The facility at the time was being properly operated;
- c. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements of the permit; and
- d. The permittee submitted notice of the emergency to the director by certified mail within two working days of the time when the emissions limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. *567 IAC 22.108(16)*

G15. Permit Deviation Reporting Requirements

A deviation is any failure to meet a term, condition or applicable requirement in the permit. Reporting requirements for deviations that result in a hazardous release or excess emissions have been indicated above (see G13 and G14). Unless more frequent deviation reporting is specified in the permit, any other deviation shall be documented in the semi-annual monitoring report and the annual compliance certification (see G4 and G5). *567 IAC 22.108(5)"b"*

G16. Notification Requirements for Sources That Become Subject to NSPS and NESHAP Regulations

During the term of this permit, the permittee must notify the department of any source that becomes subject to a standard or other requirement under 567-subrule 23.1(2) (standards of performance of new stationary sources) or section 111 of the Act; or 567-subrule 23.1(3) (emissions standards for hazardous air pollutants), 567-subrule 23.1(4) (emission standards for hazardous air pollutants for source categories) or section 112 of the Act. This notification shall be submitted in writing to the department pursuant to the notification requirements in 40 CFR Section 60.7, 40 CFR Section 61.07, and/or 40 CFR Section 63.9. *567 IAC 23.1(2), 567 IAC 23.1(3), 567 IAC 23.1(4)* This notification must be made to Polk County Air Quality Division, in lieu of the Department, upon adoption of the NSPS or NESHAP into Chapter V.

G17. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification

- 1. Off Permit Changes to a Source. Pursuant to section 502(b)(10) of the CAAA, the permittee may make changes to this installation/facility without revising this permit if:
 - a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.
 - b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);
 - c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);
 - d. The changes are not subject to any requirement under Title IV of the Act.
 - e. The changes comply with all applicable requirements.

- f. For such a change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which will be attached to the permit by the source, the department and the administrator:
- i. A brief description of the change within the permitted facility,
 - ii. The date on which the change will occur,
 - iii. Any change in emission as a result of that change,
 - iv. The pollutants emitted subject to the emissions trade
 - v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.
 - vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and
 - vii. Any permit term or condition no longer applicable as a result of the change. *567 IAC 22.110(1)*
2. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements. *567 IAC 22.110.(2)*
3. Notwithstanding any other part of this rule, the director may, upon review of a notice, require a stationary source to apply for a Title V permit if the change does not meet the requirements of subrule 22.110(1). *567 IAC 22.110.(3)*
4. The permit shield provided in subrule 22.108(18) shall not apply to any change made pursuant to this rule. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. *567 IAC 22.110.(4)*
5. Aggregate Insignificant Emissions. The permittee shall not construct, establish or operate any new insignificant activities or modify any existing insignificant activities in such a way that the emissions from these activities no longer meet the criteria of aggregate insignificant emissions. If the aggregate insignificant emissions are expected to be exceeded, the permittee shall submit the appropriate permit modification and receive approval prior to making any change. *567 IAC 22.103.(2)*
6. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes, for changes that are provided for in this permit. *567 IAC 22.108 (11)*

G18. Duty to Modify a Title V Permit

1. Administrative Amendment.

- a. An administrative permit amendment is a permit revision that is required to do any of the following:
 - i. Correct typographical errors
 - ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the source;
 - iii. Require more frequent monitoring or reporting by the permittee; or
 - iv. Allow for a change in ownership or operational control of a source where the director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the director.
- b. The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. The request shall be submitted to the director.
- c. Administrative amendments to portions of permits containing provisions pursuant to Title IV of the Act shall be governed by regulations promulgated by the administrator under Title IV of the Act.

2. Minor Permit Modification.

- a. Minor permit modification procedures may be used only for those permit modifications that do any of the following:
 - i. Do not violate any applicable requirements
 - ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit.
 - iii. Do not require or change a case by case determination of an emission limitation or other standard, or increment analysis.
 - iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act.;
 - v. Are not modifications under any provision of Title I of the Act; and
 - vi. Are not required to be processed as significant modification.
- b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:
 - i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs.
 - ii. The permittee's suggested draft permit
 - iii. Certification by a responsible official, pursuant to 567 IAC 22.107(4), that the proposed modification meets the criteria for use of a minor permit modification procedures and a request that such procedures be used; and
 - iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 22.107(7).

c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this change and until the director takes any of the actions specified in 567 IAC 22.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee need not comply with the existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, existing permit terms and conditions it seeks to modify may subject the facility to enforcement action.

3. Significant Permit Modification. Significant Title V modification procedures shall be used for applications requesting Title V permit modifications that do not qualify as minor Title V modifications or as administrative amendments. These include but are not limited to all significant changes in monitoring permit terms, every relaxation of reporting or recordkeeping permit terms, and any change in the method of measuring compliance with existing requirements. Significant Title V modifications shall meet all requirements of 567 IAC Chapter 22, including those for applications, public participation, review by affected states, and review by the administrator, and those requirements that apply to Title V issuance and renewal. 567 IAC 22.111-567 IAC 22.113 The permittee shall submit an application for a significant permit modification not later than three months after commencing operation of the changed source unless the existing Title V permit would prohibit such construction or change in operation, in which event the operation of the changed source may not commence until the department revises the permit. 567 IAC 22.105(1)"a"(4)

G19. Duty to Obtain Construction Permits

Unless exempted under 567 IAC 22.1(2) and Chapter V, Article X, 5-33, the permittee must not construct, install, reconstruct, or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit, conditional permit, or permit pursuant to 567 IAC 22.8 & Polk County Chapter V, Article X, 5-28, or permits required pursuant to 567 IAC 22.4 and 567 IAC 22.5. Such permits shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source. 567 IAC 22.1(1) and Chapter V, Article X, 5-28

G20. Asbestos

The permittee shall comply with 567 IAC 23.1(3)"a", and 567 IAC 23.2(3)"g" when conducting any renovation or demolition activities at the facility. 567 IAC 23.1(3)"a", and 567 IAC 23.2

G21. Open Burning

The permittee is prohibited from conducting open burning, except as may be allowed by Chapter V, Article III, 5-7

G22. Acid Rain (Title IV) Emissions Allowances

The permittee shall not exceed any allowances that it holds under Title IV of the Act or the regulations promulgated thereunder. Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners or operators of the unit or the designated representative of the owners or operators is prohibited.

Exceedences of applicable emission rates are prohibited. The use of any allowance prior to the year for which it was allocated is prohibited. Contravention of any other provision of the permit is prohibited. 567 IAC 22.108(7)

G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements

1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:

a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.

b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.

c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.

d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.

2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.

d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)

e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.

f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.

3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.

4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,

5. The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *40 CFR part 82*

G24. Permit Reopenings

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. *567 IAC 22.108(9)"c"*
2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.
 - a. Reopening and revision on this ground is not required if the permit has a remaining term of less than three years;
 - b. Reopening and revision on this ground is not required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to June 25, 1993.
 - c. Reopening and revision on this ground is not required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. *567 IAC 22.108(17)"a"*, *567 IAC 22.108(17)"b"*
3. A permit shall be reopened and revised under any of the following circumstances:
 - a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to June 25, 1993, provided that the reopening may be stayed pending judicial review of that determination;
 - b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;
 - c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.

d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements. *567 IAC 22.114(1)*

4. Proceedings to reopen and reissue a Title V permit shall follow the procedures applicable to initial permit issuance and shall effect only those parts of the permit for which cause to reopen exists. *567 IAC 22.114(2)*

G25. Permit Shield

Compliance with the conditions of this permit shall be deemed compliance with the applicable requirements included in this permit, as of the date of permit issuance.

This permit shield shall not alter or affect the following:

1. The provisions of section 303 of the Act (emergency orders), including the authority of the administrator under that section;
2. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
3. The applicable requirements of the acid rain program, consistent with section 408(a) of the Act;
4. The ability of the department or the administrator to obtain information from the facility pursuant to section 114 of the Act. *567 IAC 22.108 (18)*

G26. Severability

The provisions of this permit are severable and if any provision or application of any provision is found to be invalid by this Department or a court of law, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected by such finding. *567 IAC 22.108 (8) and Chapter V, Article XVII, 5-77*

G27. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. *567 IAC 22.108 (9)"d"*

G28. Transferability

This permit is not transferable from one source to another. If title to the facility or any part of it is transferred, an administrative amendment to the permit must be sought to determine transferability of the permit. *567 IAC 22.111 (1)"d"*

G29. Disclaimer

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. *567 IAC 22.3(3)"c"*

G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification

The permittee shall notify the department's stack test contact in writing not less than 30 days before a required test or performance evaluation of a continuous emission monitor is performed to determine compliance with an applicable requirement. For the department to consider test results a valid demonstration of compliance with applicable rules or a permit condition, such notice shall be given. Such notice shall include the time, the place, the name of the person who will conduct the test and other information as required by the department. Unless specifically waived by the department's stack test contact, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. The department may accept a testing protocol in lieu of a pretest meeting. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which the source shall be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the equipment manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that the source has been physically altered so that capacity cannot be exceeded, or the department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the department to determine whether such source is in compliance.

Stack test notifications, reports and correspondence shall be sent to:

Stack Test Review Coordinator
Iowa DNR, Air Quality Bureau
7900 Hickman Road, Suite #1
Urbandale, IA 50322
(515) 242-6001

Within Polk County, stack test notifications, reports, correspondence, and the appropriate fee shall also be directed to the supervisor of the county air pollution program.

567 IAC 25.1(7)"a", 567 IAC 25.1(9) and Chapter V, Article VII, 5-18 and 5-19

G31. Prevention of Air Pollution Emergency Episodes

The permittee shall comply with the provisions of 567 IAC Chapter 26 in the prevention of excessive build-up of air contaminants during air pollution episodes, thereby preventing the occurrence of an emergency due to the effects of these contaminants on the health of persons. *567 IAC 26.1(1)*

G32. Contacts List

The current address and phone number for reports and notifications to the EPA administrator is:

Chief of Air Permits

EPA Region 7

Air Permits and Compliance Branch

901 North 5th Street

Kansas City, KS 66101

(913) 551-7020

The current address and phone number for reports and notifications to the Department or the Director is:

Chief, Air Quality Bureau

Iowa Department of Natural Resources

7900 Hickman Road, Suite #1

Urbandale, IA 50322

(515) 242-5100

Reports or notifications to the local program shall be directed to the supervisor at the appropriate local program. Current address and phone number is:

Polk County Public Works

Air Quality Division

5885 NE 14th Street

Des Moines, IA 50313-1296

(515) 286-3351

Appendix A: Consent Decree C.D. IL, #03-CV-2066

Go to:

www.epa.gov/compliance/resources/decrees/index.html
(See Attachment 9 and 13)

Appendix B: 40 CFR Part 63 Subpart GGGG Tables

Table 1 of §63.2833 -- Categorizing Your Source as Existing or New

If your affected source...	And if...	Then your affected source...
(1) was constructed or began construction before May 26, 2000	reconstruction has not occurred	is an existing source.
(2) began reconstruction, as defined in §63.2, on or after May 26, 2000	(i) reconstruction was part of a scheduled plan to comply with the existing source requirements of this subpart; and (ii) reconstruction was completed no later than 3 years after the effective date of this subpart	remains an existing source.
(3) began a significant modification, as defined in §63.2872, at any time on an existing source	the modification does not constitute reconstruction	remains an existing source.
(4) began a significant modification, as defined in §63.2872, at any time on a new source	the modification does not constitute reconstruction	remains a new source.
(5) began reconstruction on or after May 26, 2000	reconstruction was completed later than 3 years after the effective date of this subpart	is a new source.
(6) began construction on or after May 26, 2000		is a new source.

Table 1 of §63.2834 -- Compliance Dates for Existing and New Sources

If your affected source is categorized as...	And if...	Then your compliance date is...
(a) an existing source		3 years after the effective date of this subpart.
(b) a new source	you startup your affected source before the effective date of this subpart	the effective date of this subpart.
(c) a new source	you startup your affected source on or after the effective date of this subpart	your startup date.

Type of Oilseed Process	A source that...	Oilseed Solvent Loss Factor (gal/ton)	
		Existing Sources	New Sources
(i) Corn Germ, Wet Milling	processes corn germ that has been separated from other corn components using a “wet” process of centrifuging a slurry steeped in a dilute sulfurous acid solution.	0.4	0.3
(ii) Corn Germ, Dry Milling	processes corn germ that has been separated from the other corn components using a “dry” process of mechanical chafing and air sifting.	0.7	0.7
(iii) Cottonseed, Large	processes 120,000 tons or more of a combination of cottonseed and other listed oilseeds during all normal operating periods in a 12 operating month period.	0.5	0.4
(iv) Cottonseed, Small	processes less than 120,000 tons of a combination of cottonseed and other listed oilseeds during all normal operating periods in a 12 operating month period.	0.7	0.4
(v) Flax	processes flax.	0.6	0.6
(vi) Peanuts	processes peanuts.	1.2	0.7
(vii) Rapeseed	processes rapeseed.	0.7	0.3
(viii) Safflower	processes safflower.	0.7	0.7
(ix) Soybean, Conventional	uses a conventional style desolventizer to produce crude soybean oil products and soybean animal feed products.	0.2	0.2
(x) Soybean, Specialty	uses a special style desolventizer to produce soybean meal products for human and animal consumption.	1.7	1.5
(xi) Soybean, Combination Plant with Low Specialty Production	processes soybeans in both specialty and conventional desolventizers and the quantity of soybeans processed in specialty desolventizers during normal operating periods is less than 3.3 percent of total soybeans processed during all normal operating periods in a 12 operating month period. The corresponding solvent loss factor is an overall value and applies to the total quantity of soybeans processed.	0.25	0.25
(xii) Sunflower	processes sunflower.	0.4	0.3

Table 1 of §63.2840 -- Oilseed Solvent Loss Factors for Determining Allowable HAP Loss

If your source is...	and is operating under...	then your recordkeeping schedule ...	You must determine your first compliance ratio by the end of the calendar month following...	Base your first compliance ratio on information recorded...
(a) Existing	Normal operation,	Begins on the compliance date.	The first 12 operating months after the compliance date.	During the first 12 operating months after the compliance date.
(b) New	(1) Normal operation,	Begins on the startup date of your new source.	The first 12 operating months after the startup date of the new source.	During the first 12 operating months after the startup date of the new source.
	(2) An initial startup period,	Begins on the startup date of your new source.	The first 12 operating months after termination of the initial startup period, which can last for up to 6 months.	During the first 12 operating months after the initial startup period, which can last for up to 6 months.
(c) Existing or new that has been significantly modified	(1) Normal operation,	Resumes on the startup date of the modified source.	The first operating month after the startup date of the modified source.	During the previous 11 operating months prior to the significant modification and the first operating month following the initial startup date of the source.
	(2) An initial startup period,	Resumes on the startup date of the modified source.	The first operating month after termination of the initial startup period, which can last up to 3 months.	During the 11 operating months before the significant modification and the first operating month after the initial startup period.

**Table 2 of §63.2850 -- Schedules for Demonstrating Compliance Under Various
Source Op**